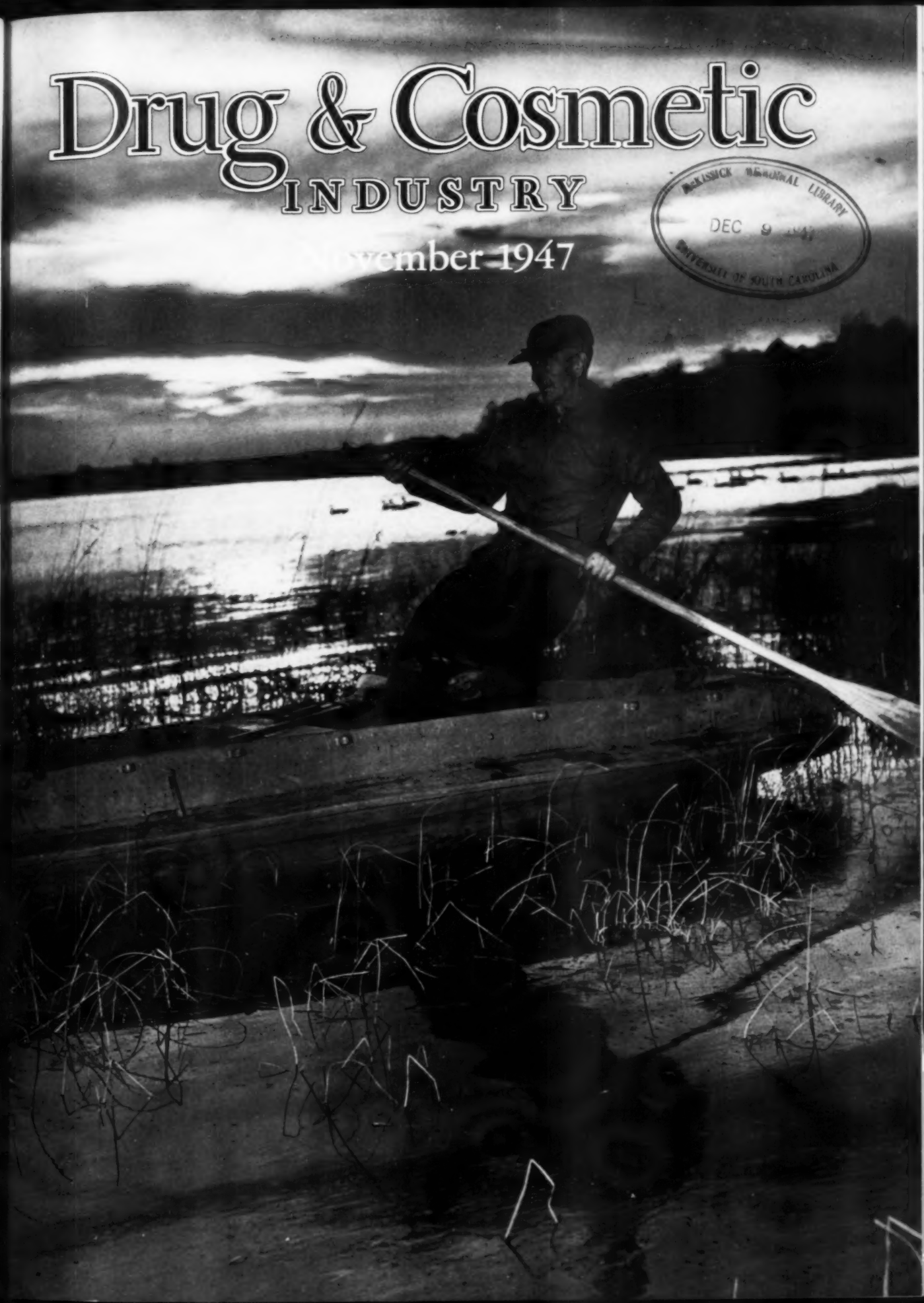
Drug & Cosmetic INDUSTRY

November 1947



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Drug & Cosmetic INDUSTRY

NOVEMBER 1947

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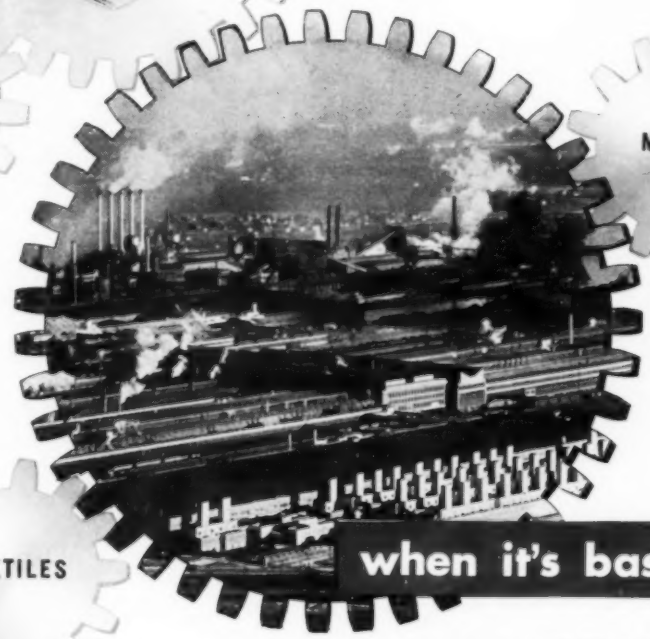

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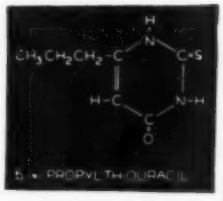

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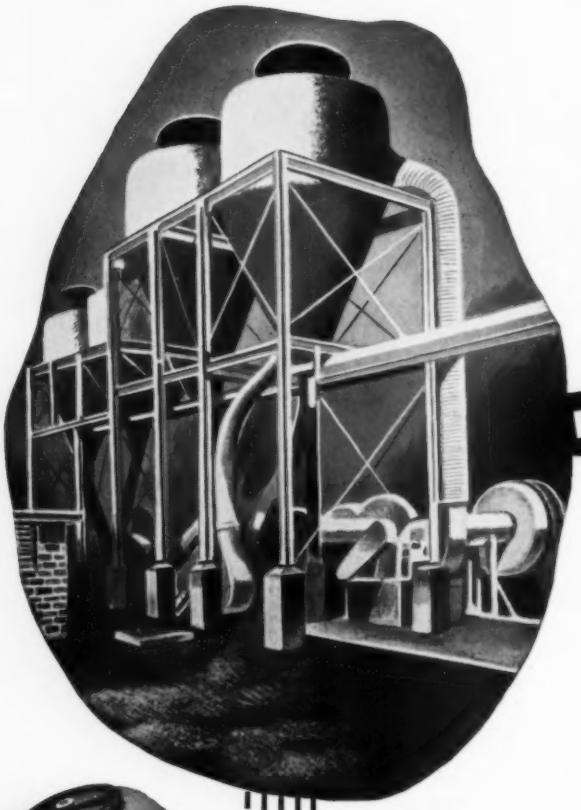

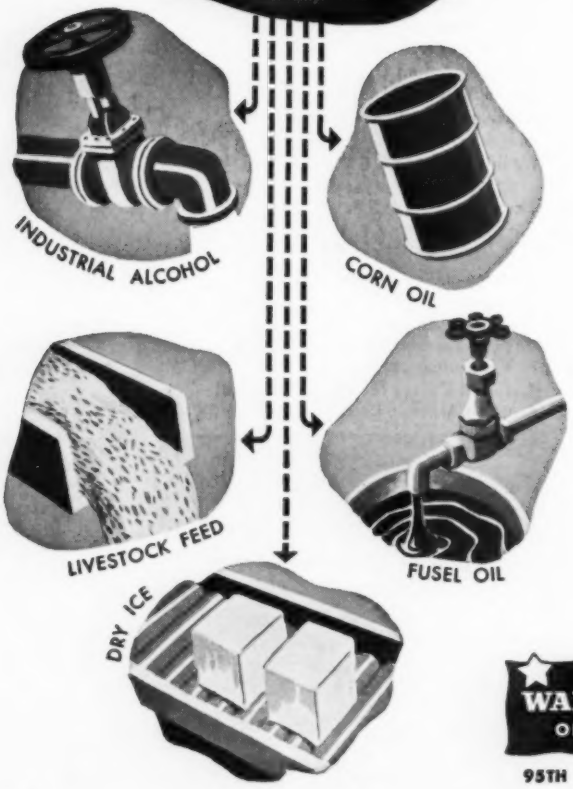

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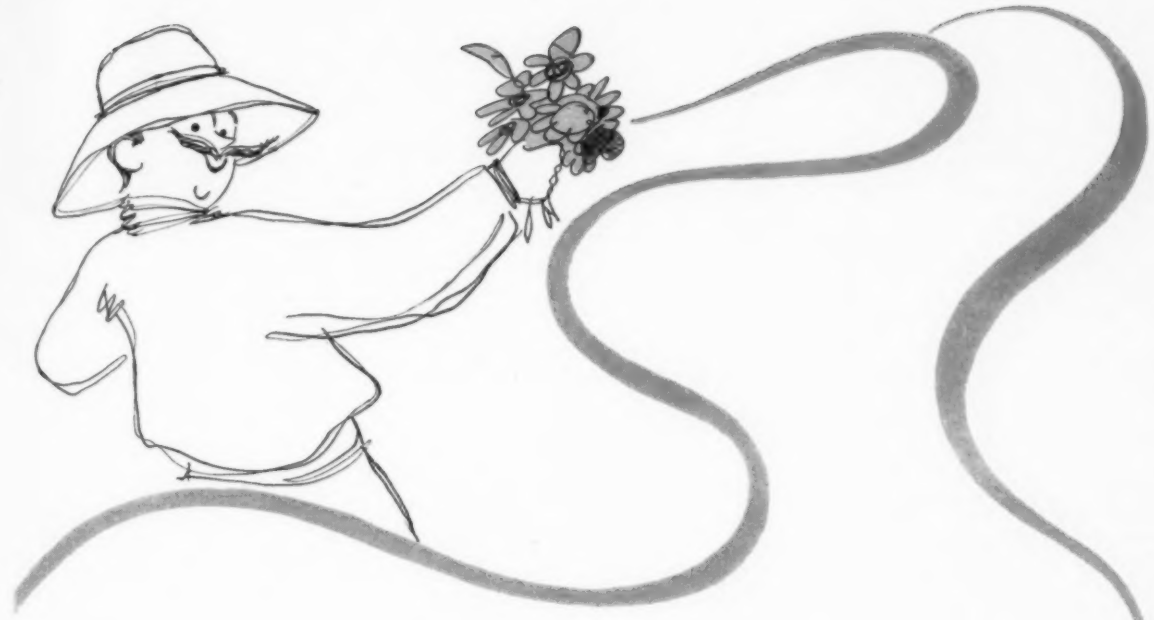

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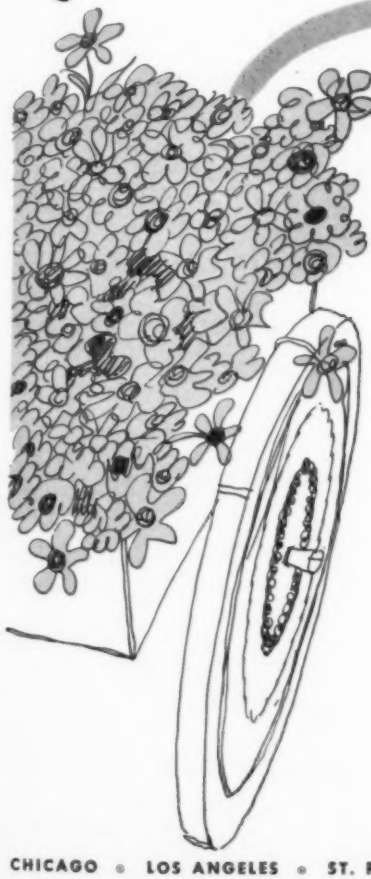

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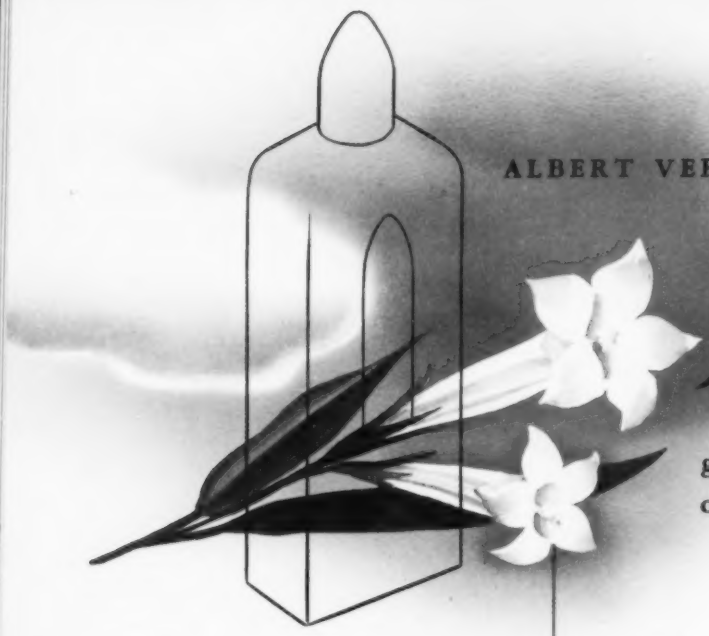

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In the old-fashioned gardens of a bygone day, they planted "Sweet Tobacco" or "Shooting Star" — now technically known as "Nicotinia Assimis" — directly under bedroom windows, so that its fragrance might be wafted into the sleeping chambers during the early morning hours when it is sweetest.

Picture, if you will, a sweet, powerful blend of Jasmin, Tuberose, Carnations, and Roses — with just a bit of the pungency of the Narcisse. Nicotinia Verley is offered to you as a glorified replica of this fragrant American garden favorite. It can be used in all toilet goods.

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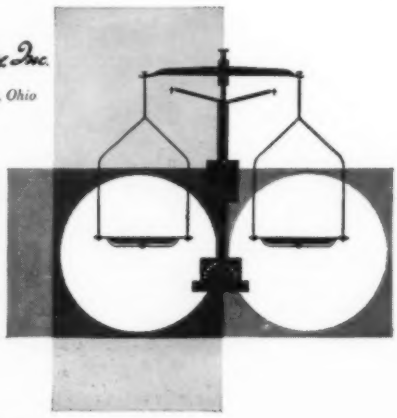

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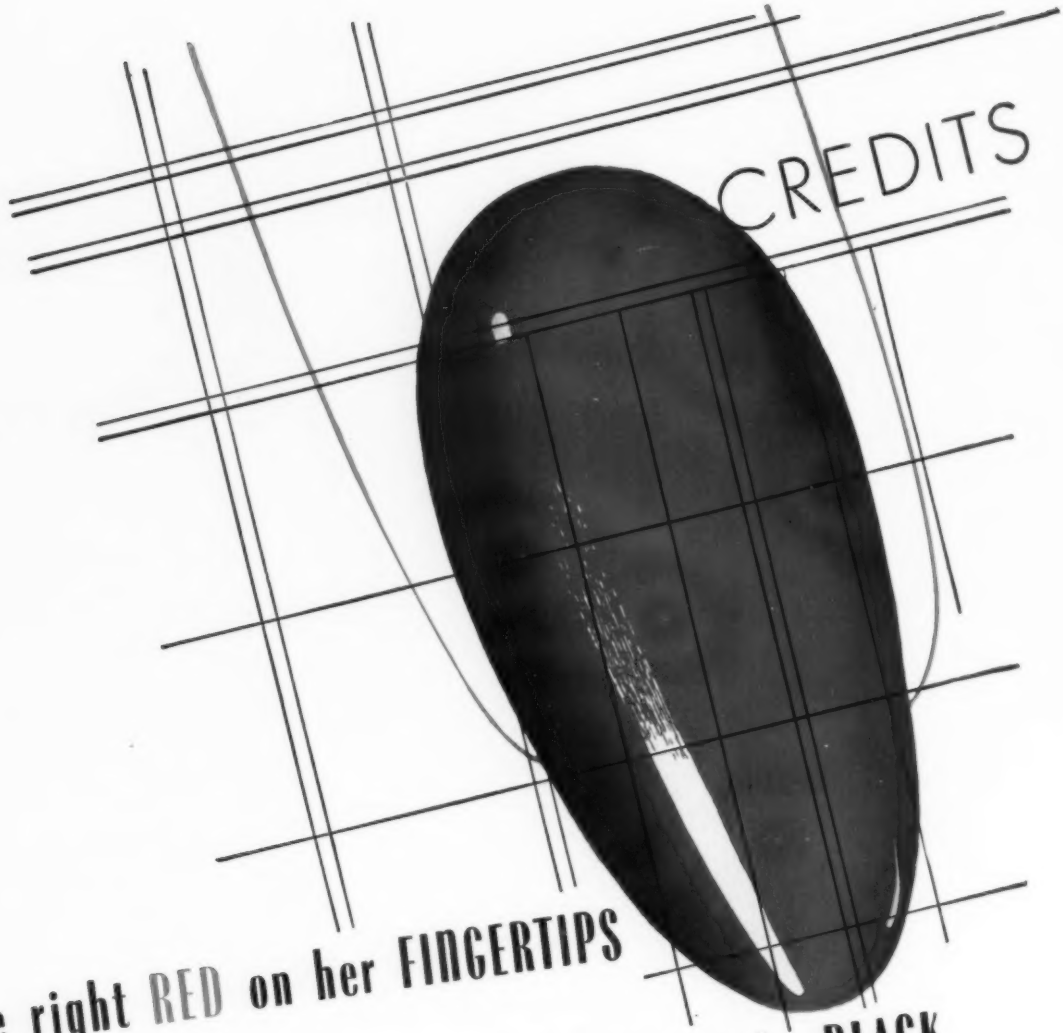

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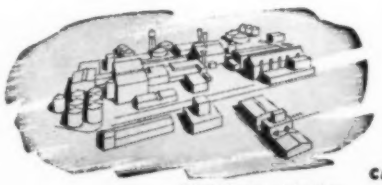

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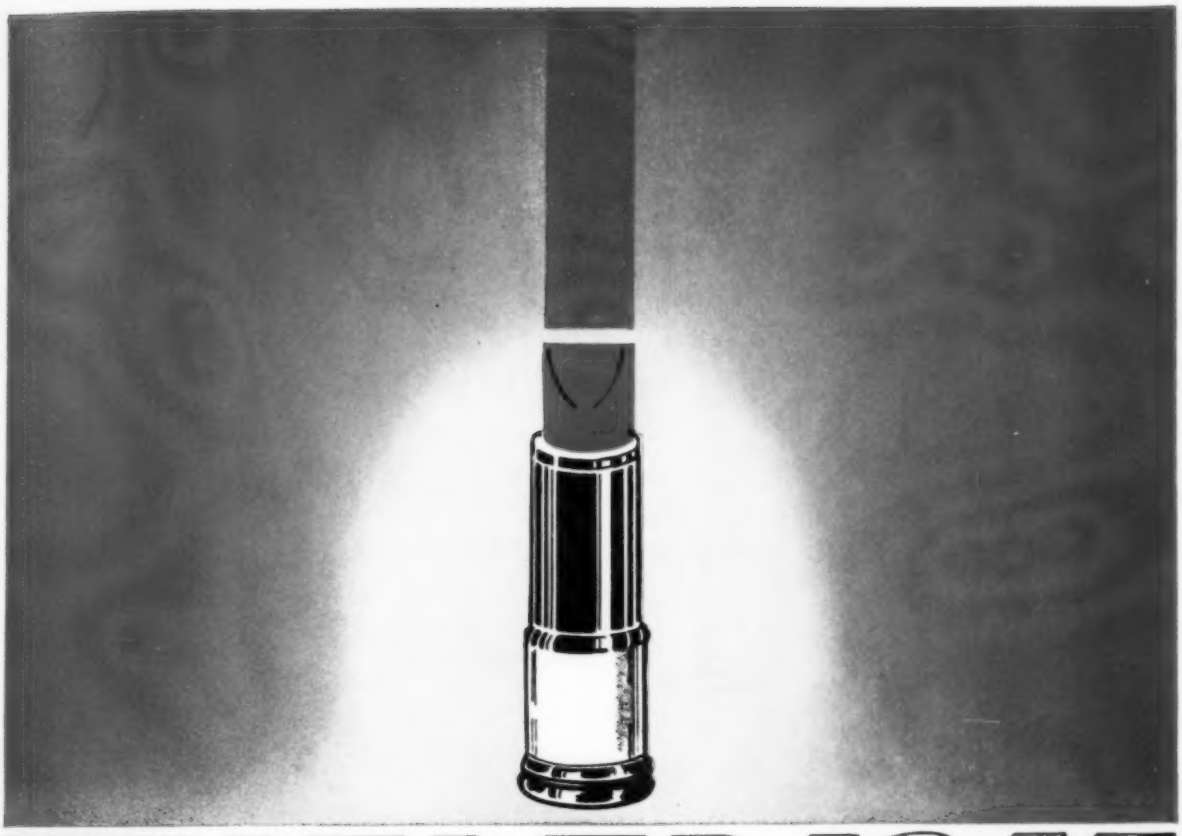

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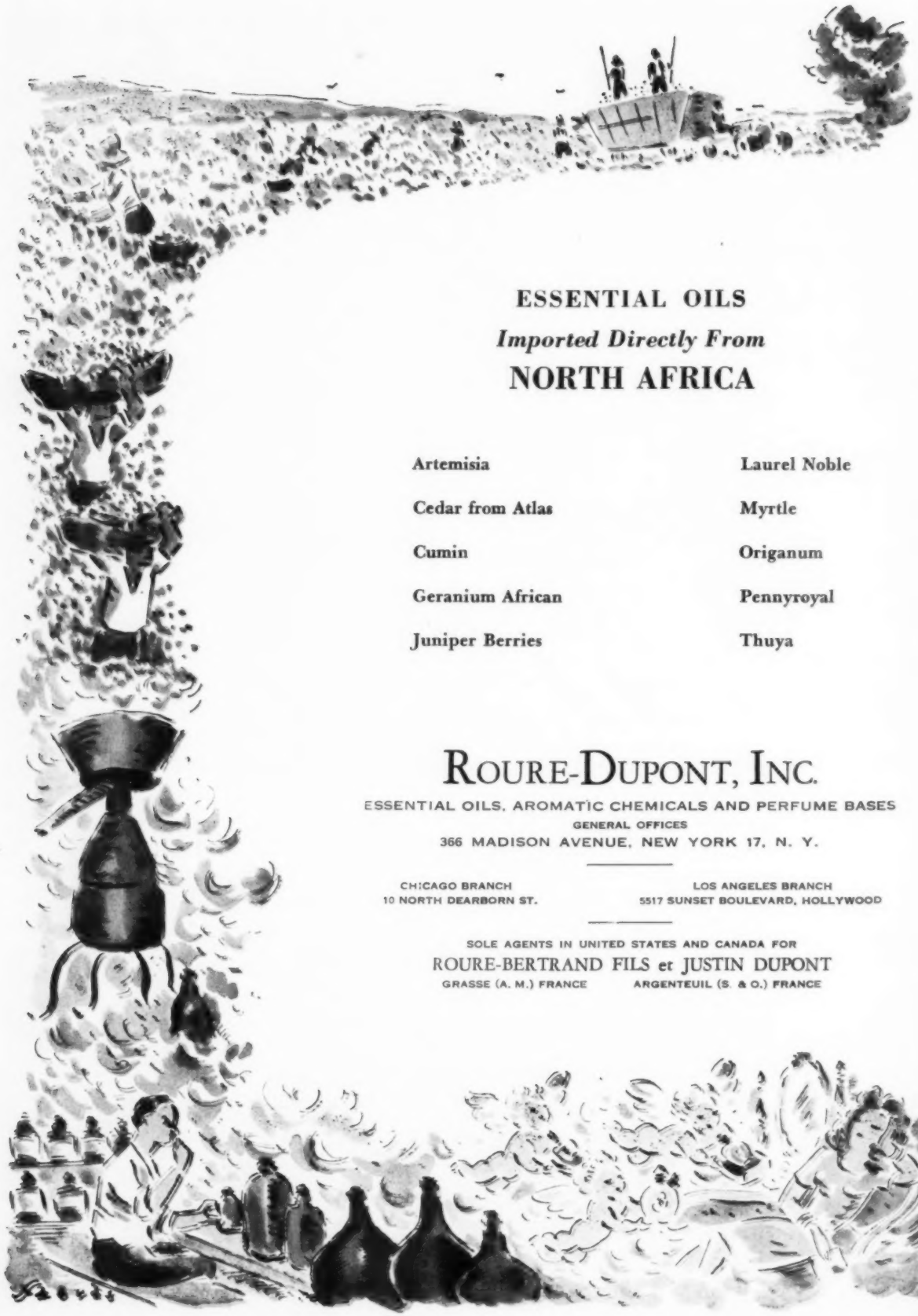

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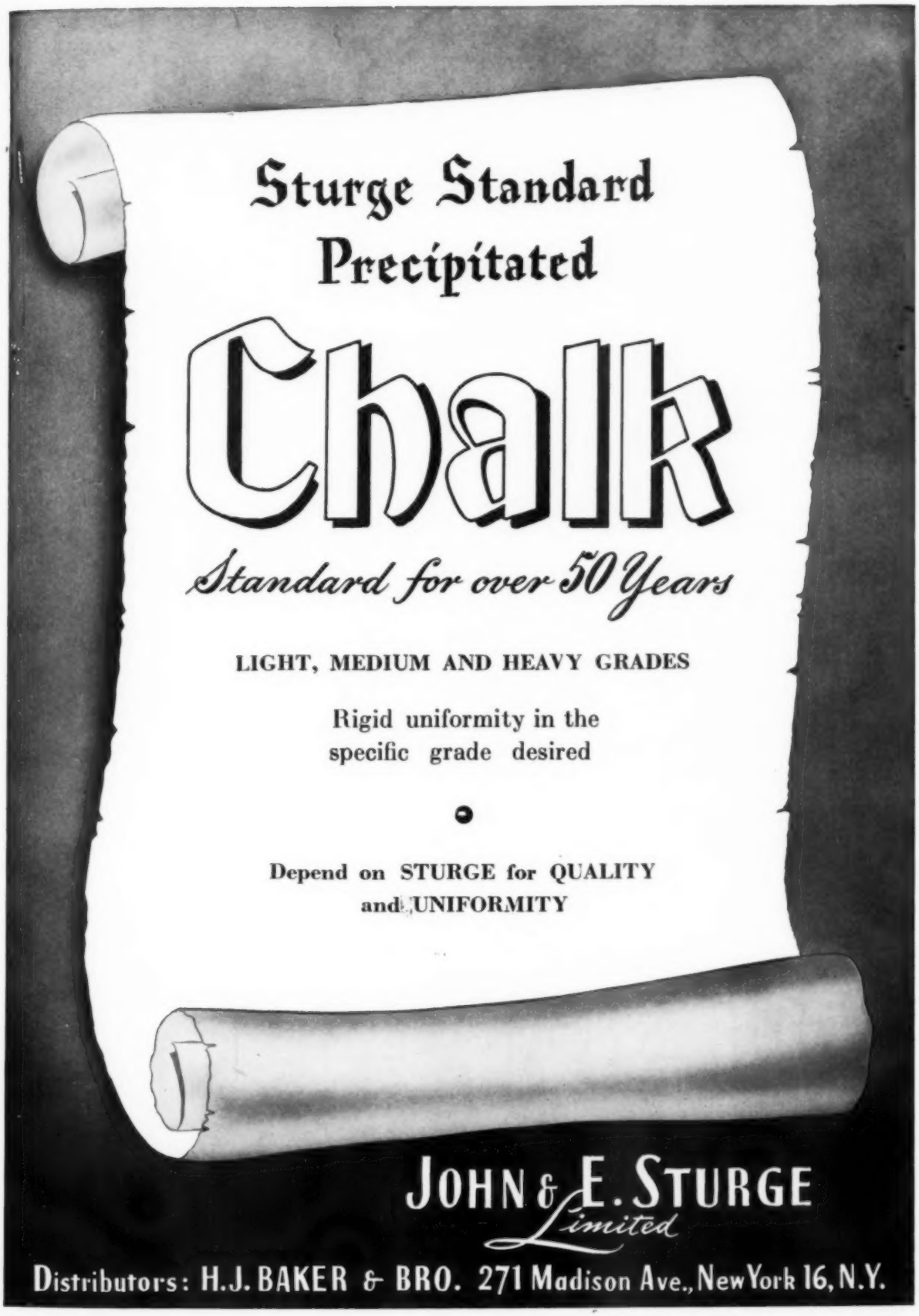
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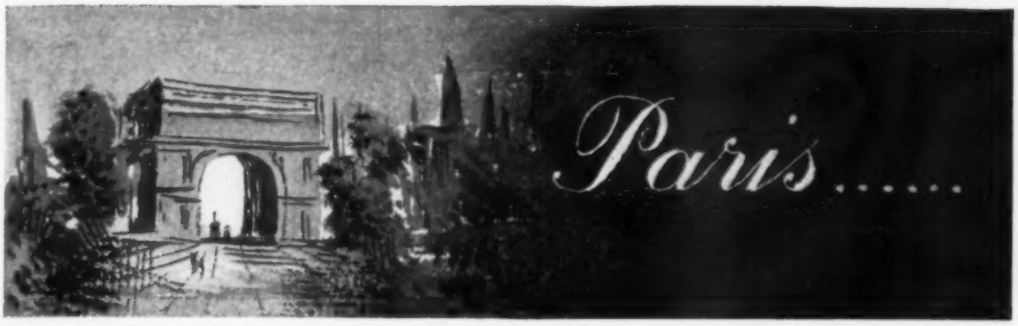

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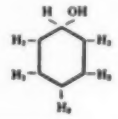
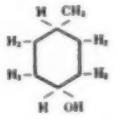


Mol. Wt.	100.1
Sp. Gr., 25°/15.5°C	0.945
R. I., n20/D	1.4654
Flash Point	68°C
F. R. High Grade	18° to 22°C
Tech Grade	0° to 5°C
B. R. High Grade (100%)	159° to 163°C
Tech Grade (95%)	155° to 165°C

Methyl Cyclohexanol
$CH_3CH_{10}OH$



Mol. Wt.	114.1
Sp. Gr., 15.5°/15.5°	0.924
R. I., n20/D	1.461
Flash and Fire Points	71°C
F. R.	about 20°C
B. R. (100%)	155° to 180°C

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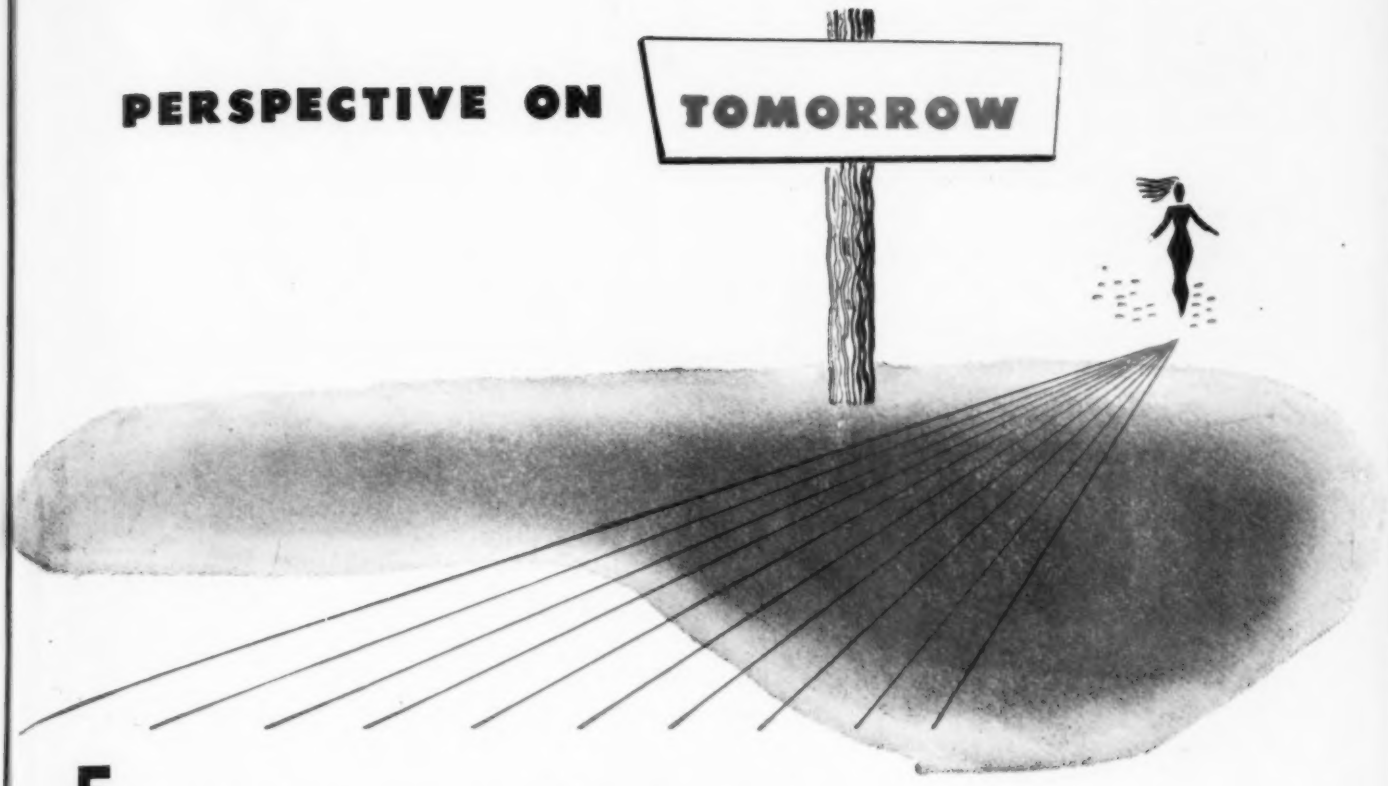

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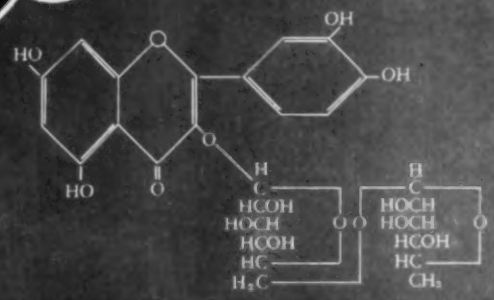

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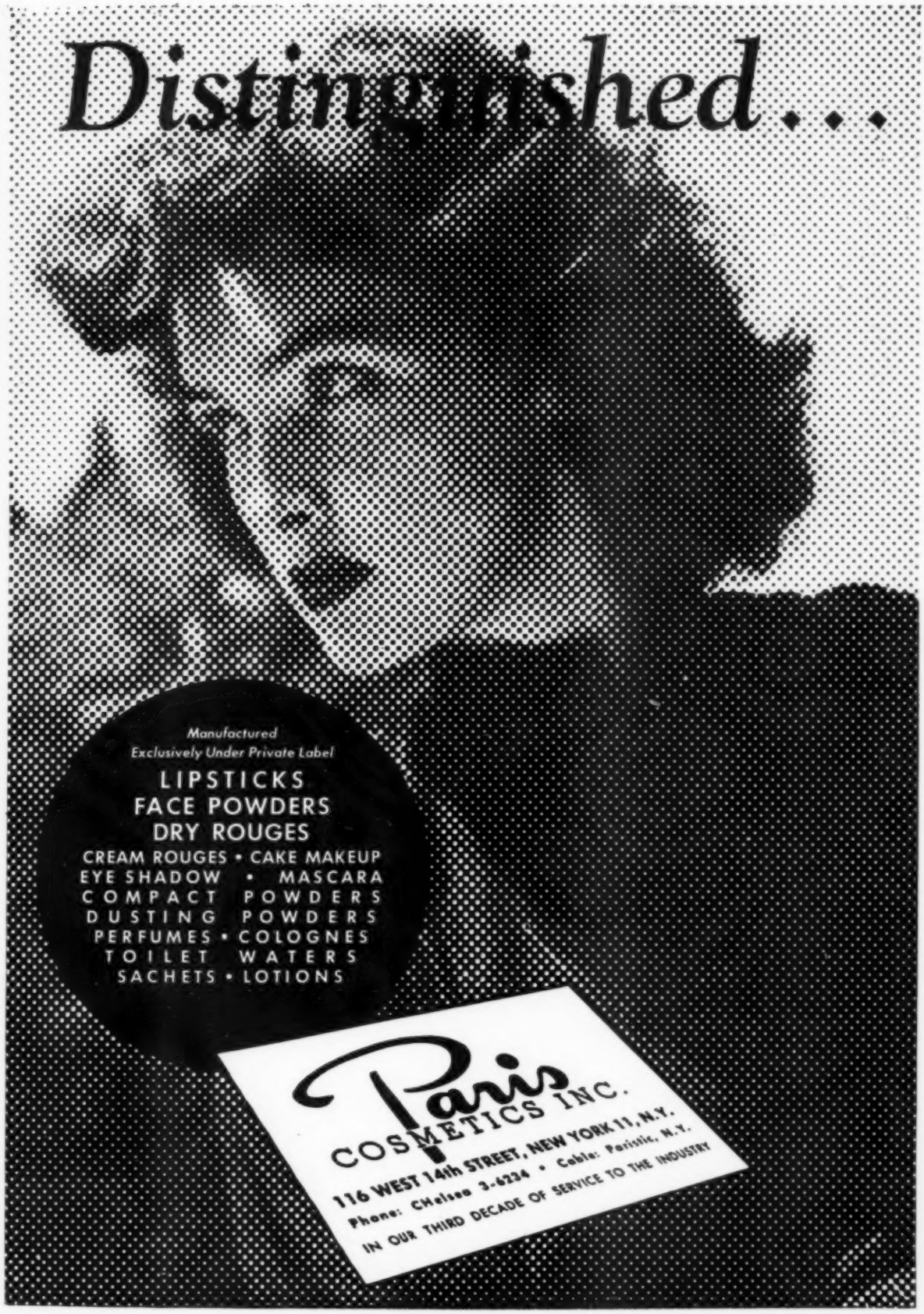
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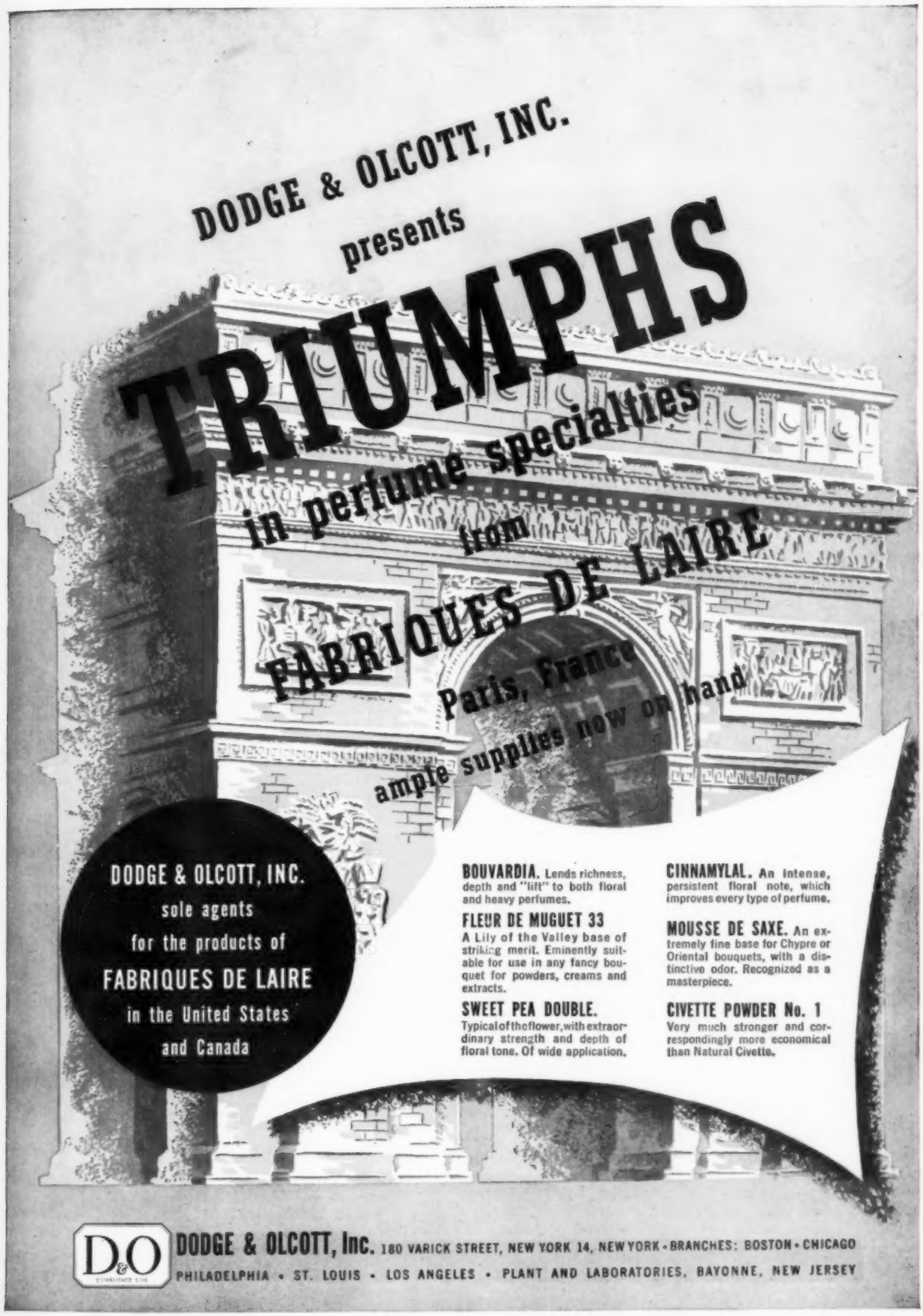
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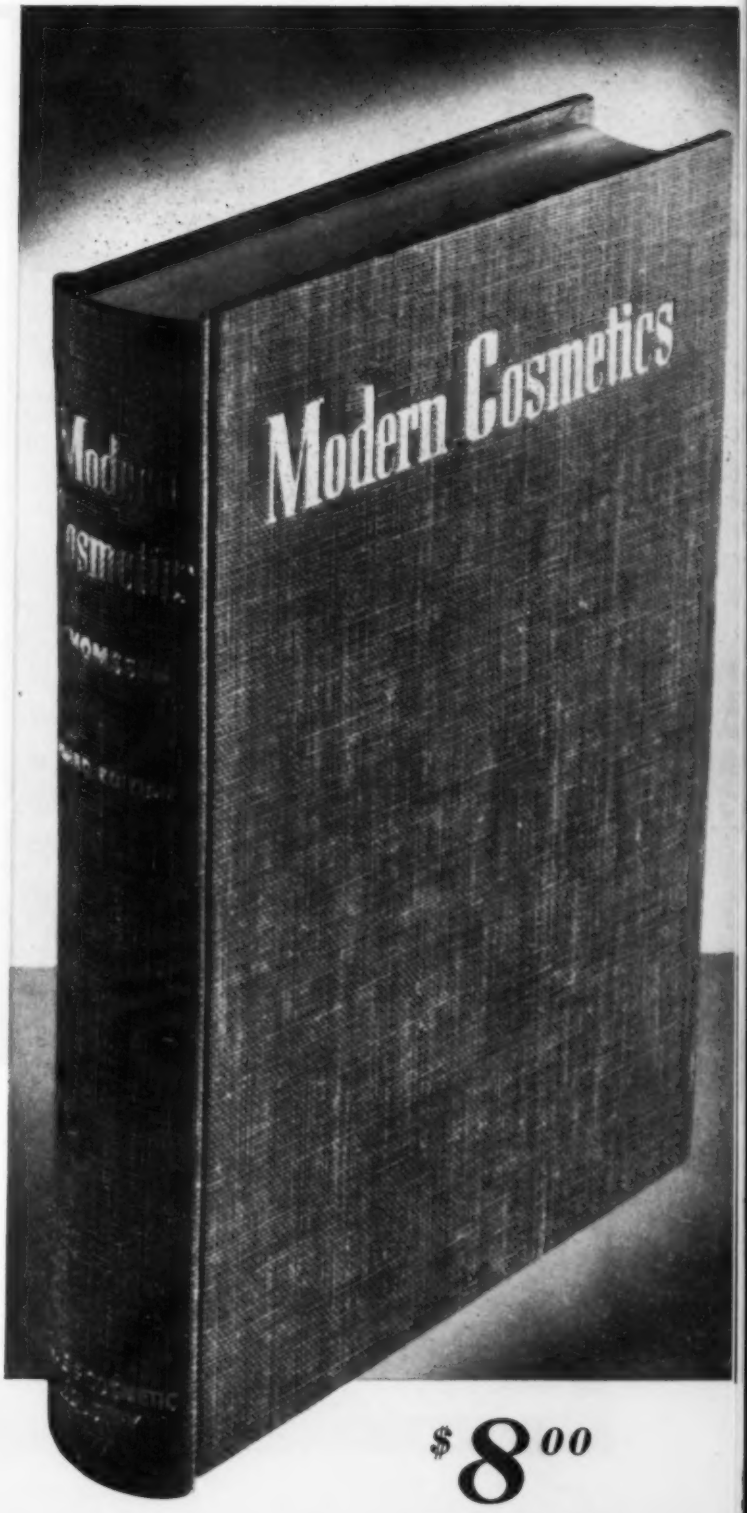

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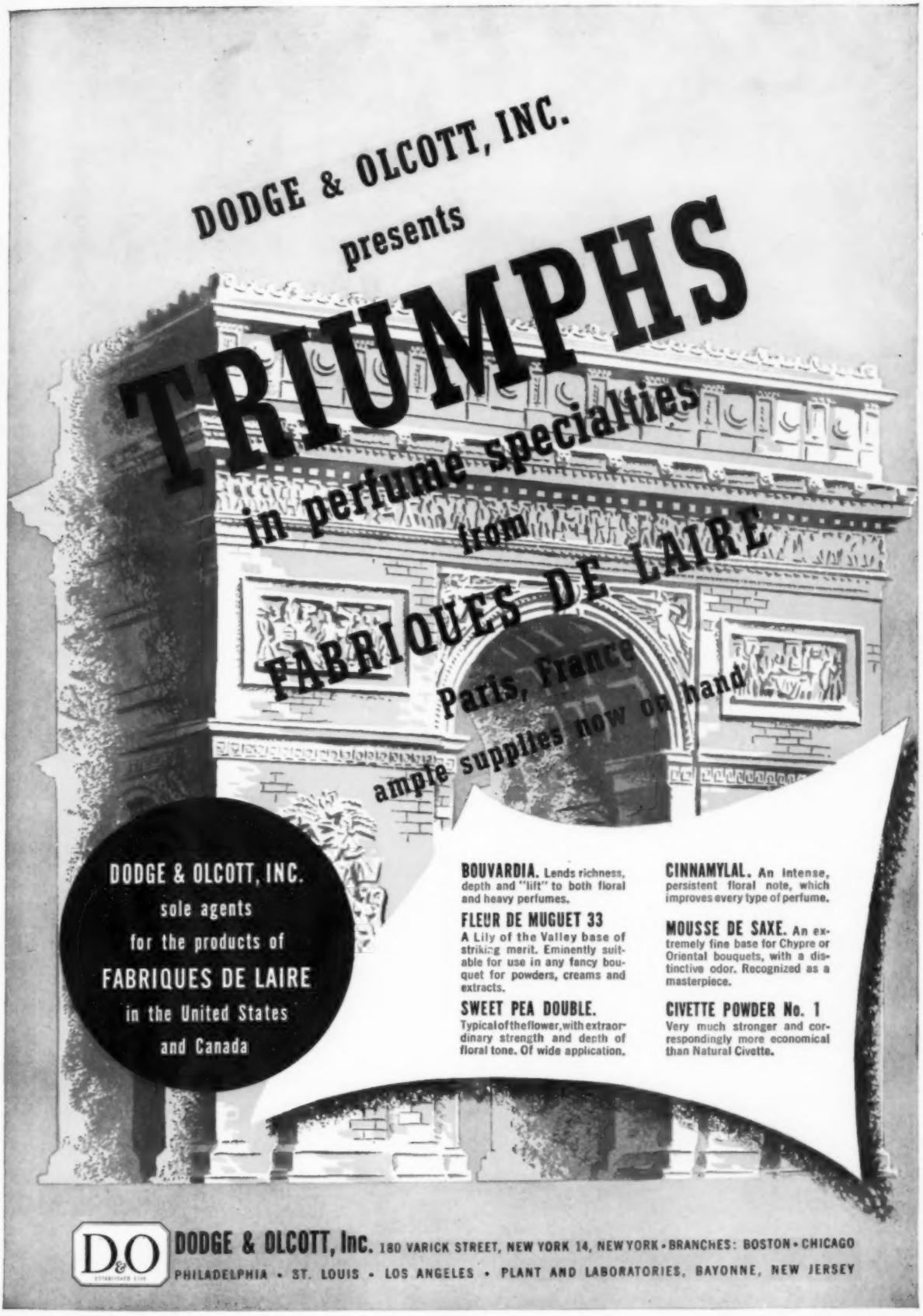
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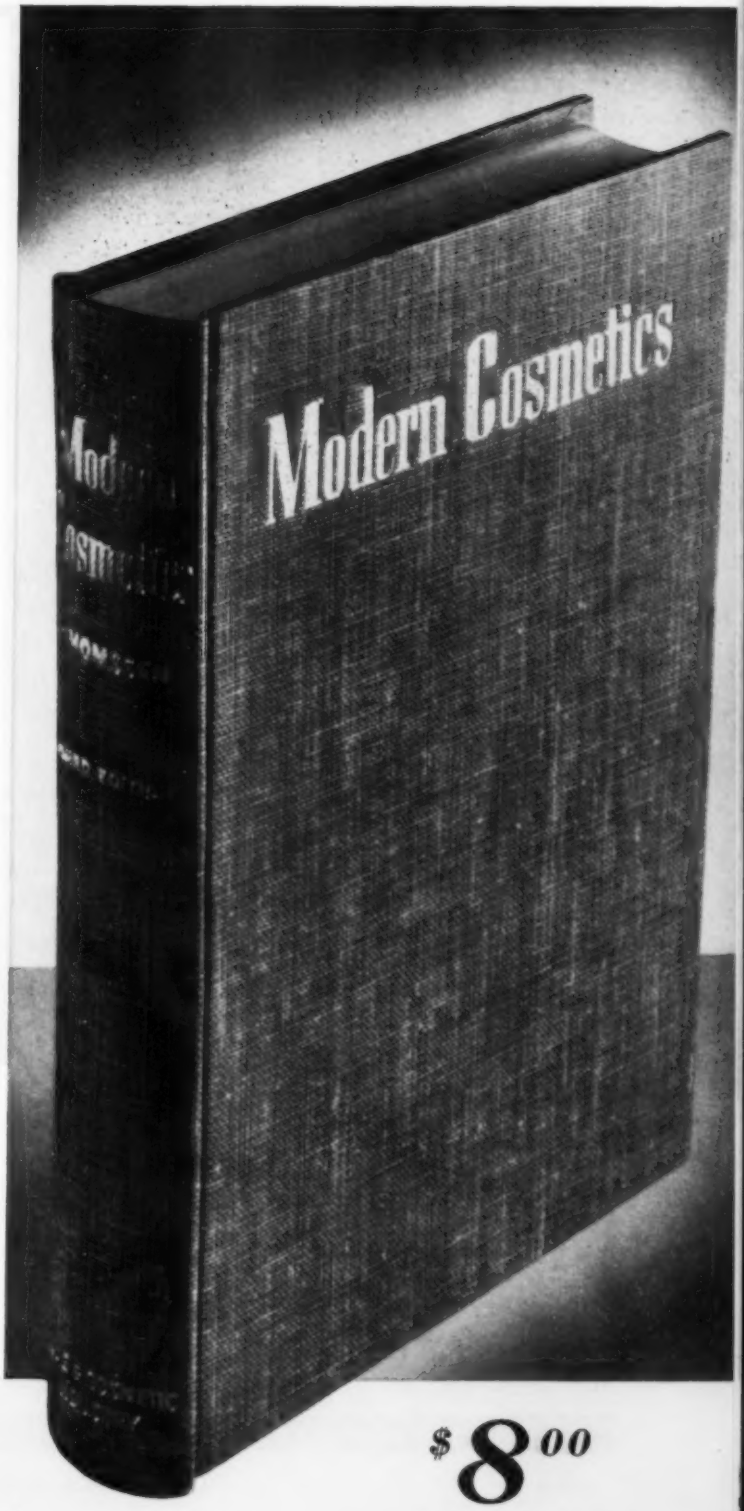

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State Medicine in New Zealand

WITH regard to socialized medicine the Journal of the American Medical Association reports on ten years of state medicine in New Zealand:

Sir Ernest Graham-Little, dermatologist, member of Parliament and well-known writer on medical politics, shows in the Daily Telegraph the results of a state medical service in New Zealand, where it was instituted by the labor government and has been in operation for ten years. Since the war the system has been fully reviewed in the House of Representatives, and almost universal dissatisfaction with it has been expressed. The complaint was made that it is a common practice for physicians operating the health services to undertake treatment of an impossible number of patients and to push them through at the rate of one every five minutes. If the diagnosis is not conclusive the patients are sent to the public hospitals, which are consequently filled with trivial cases, crowding out serious cases. The prime minister, who had a large part in founding the scheme, was so shaken by the evidence that he said: "If patients are being treated like sheep passing through a dip, without proper overhaul, the matter should be investigated." In a subsequent article the minister of health admitted that the abuses of the system were such that the government must seriously consider altering it. Other criticisms have been made. For instance it is contended that while state doctors draw extravagant incomes from the social security fund, it is extremely difficult to secure any medical attention outside business hours or during the week-end. There is said to be a definite falling off in the standard of medical practice, from the ethical and clinical points of view. The absence of incentive to undertake the prolonged training to qualify for the status of specialist has resulted in a serious dearth of skilled physicians and surgeons and consequent discouragement of both medical research and postgraduate study. The cost of security benefits has mounted sharply. During the year ending March 1, it was $139,000,000 against $83,000,000 for the previous year. The drug bill increased from $2,250,000 in 1943 to $5,700,000 in 1947 and the medical benefits from $4,000,000 to $7,000,000 in the same period.

Estrogenic Preparations Prices Low

THE MARKET for the natural estrogenic products has declined very sharply over the past year. Some five years ago, there were only about five producers of these hormones, but just recently there were about eighty of them. Within the past few months, at least ten of these are said to have abandoned the field. The price has declined within the past five years from eighty dollars per gram to twenty-six dollars per gram. Within a year, the price has broken from fifty dollars per gram to the present level of twenty-six dollars. The urine of pregnant mares, from which the estrogenic products are extracted, is said to have declined in price from one dollar to fifty cents. The background of this situation is that the operation is not a complicated one and therefore many who were employed by firms making the preparations started their own businesses. Soon the field became crowded and the natural result was that over-production arrived and prices declined in the face of sharp competition brought about by the fight of producers of these products alone to survive. Some producers, who are large producers of many other products, are determining whether or not they will stay in the field. Several say present prices are below their costs.

Fair Trade and Surplus Goods

FAIR TRADE laws and war surplus stocks have had their first bout in court with the fair trade laws winning the verdict. Under the State of Washington Fair Trade Law, a temporary injunction was granted to E. R. Squibb & Sons restraining a retailer from selling to the public merchandise if damaged, defaced, or deteriorated in quality, at less than the minimum retail resale price, unless adequate notice of such condition is given to the public. The merchandise involved in the action was 170 tubes of Squibb shaving cream acquired by the retailer from war surplus stocks. The retailer alleged that the goods were damaged and could therefore be sold at lower than minimum prices. Squibb maintained that only a small portion of the tubes on display were obviously damaged and that, therefore, without due notice the public would have no knowledge of the inferior quality of the merchandise.

What Is Socialized Medicine?

IN ANSWER to the question, "What is the definition for State Medicine?" the American Medical Association replied as follows:

The terms "state medicine," "socialized medicine," "public health," and "sickness insurance," are often used interchangeably. Actually there are distinctions which should be kept in mind. Socialized medicine is an all inclusive term and connotes a form of medical practice in which the method of distributing medical care is made subject to the uses or influences of groups of persons, the community or the state. State medicine is a form of socialized medicine in which the state attempts to provide medical services directly to the general population from funds raised by taxation. The end result is that physicians become employees of the state, with medical practice subject to the directives of a third party. Any form of state medicine necessarily embodies the use of compulsion. Public health is a form of socialized medicine concerned with special groups and special activities for the protection of the health of the people as a whole. Sickness insurance is a form of socialized medicine, either voluntary or compulsory, concerned with spreading the cost of medical care.

For Diaper Rash

WE RECEIVED notice that a product called Diapene for elimination of the cause of diaper rash had been reported on by Dr. Reuel A. Benson and Dr. Lawrence B. Slobody, professors of Pediatrics at the New York Medical College, Flower and Fifth Avenue Hospitals. The product comes in tablet form and is impregnated into the diaper by dissolving the tablets in the final rinse water after washing. However, the laboratory and clinical work at the college was aided by a grant from the Homemakers' Products Corporation, New York, which is introducing Diapene to the medical profession. But the point that we wish to make is this: the statement informs us that "Diapene has as its active ingredient para di-isobutyl cresoxy ethoxy dimethyl benzyl ammonium chloride monohydrate." We would hate to try to get the average mother to know that term offhand.

Industry Trends

SQUIBB explains that the drop in third quarter sales and earnings was caused by summer vacations, a slump in the sales of perfumes and toilet articles, and high alcohol and glycerine prices which hurt tooth paste profits. In September, however, sales of perfumes and toilet articles by the Lentheric subsidiary recovered sharply and sales in October were even better, reaching a new high. The trend in penicillin sales and prices which had been downward has reversed itself and demand now exceeds supply.

Postwar Drug and Cosmetic Prices

CLAIMING that fair trade pricing has served to keep prices of nationally advertised drugs and cosmetics down, Fred J. Griffiths, secretary of the National Association of Chain Drug Stores, has presented to the Joint Congressional Committee on the Economic Report a study which shows that fair trade prices of 7,334 drugs and cosmetics have increased an average of only 1.39 per cent from June 1, 1939 to June 1, 1947. These items represent 85 per cent of the sales in the drug and cosmetic departments of the drug chain stores. Mr. Griffiths said that the cost to the consumer of purchasing one of each of these 7,334 items in 1939 was $14,403.29, against a cost of $14,603.56 on June 1, 1947, an increase of only $200.27, or 1.39 per cent. In weighing each of these items to show its relative importance in the public's spending on the basis of 94,719 sales in 84 chain drug stores from all sections of the country, the result showed that consumers are paying only 3.1 per cent more for their actual purchases of fair trade drugs and cosmetics than they paid in 1939. Breaking down the study into five important classifications, Mr. Griffiths said that the entire group of fair trade drugs had increased only 5.36 per cent since 1939, while vitamins had actually decreased 32.5 per cent. Fair Traded cosmetics, including 1,814 items, increased 11.83 per cent. Toiletries, including 541 items, increased 4.51 per cent, and 225 miscellaneous items increased 32.65 per cent. Pointed out were long-range price reductions on such important drugs as penicillin, 80 per cent since 1945; insulin, 65 per cent since 1925; streptomycin, 15 per cent since July 1947; and sulfathiazole tablets, 68 per cent since 1941. Mr. Griffiths contrasted this small weighted increase of 3.1 per cent for fair traded drugs and cosmetics with the cost of living increase of 59 per cent shown by the report of the Bureau of Labor Statistics of the U. S. Department of Labor.

A.P.M.A. Award To A.M.A.

THE SCIENTIFIC Award of the American Pharmaceutical Manufacturers Association, to be presented at the midyear meeting to be held at the Waldorf Astoria hotel, December 15 to 17, will be presented this year to the American Medical Association "in recognition of its fundamental contributions to public health in the field of medical research." The award ceremony will take place on December 16. The award is made on nomination by a scientific advisory committee composed of Dr. David P. Barr, professor of medicine, Medical School, Cornell University; Dr. Anton J. Carlson, emeritus professor of physiology, Medical School, University of Chicago; Dr. George R. Cowgill, professor of Nutrition, Yale University; Dr. Windsor C. Cutting, professor of therapeutics, Medical School, Stanford University; Dr. Carl A. Dragstedt, professor of pharmacology, Medical School, Northwestern University; Dr. Rollo E. Dyer, director, National Institute of Health; Dr. Everett I. Evans, professor of surgery, Medical College of Virginia; Dr. Herbert S. Gasser, director, the Rockefeller Institute for Medical Research; Dr. H. Corwin Hinshaw, professor of medicine, Mayo Foundation; Dr. Charles A. Janeway, professor of pediatrics, Medical School, Harvard University; Dr. Chester S. Keffer, professor of medicine, Medical School, Boston University; Dr. Howard B. Lewis, professor of physiological chemistry and director of College of Pharmacy, University of Michigan; Dr. Perrin H. Long, professor of preventive medicine, Medical School, Johns Hopkins University; Dr. Isaac Starr, Dean, Medical School, University of Pennsylvania; Dr. H. B. Van Dyke, professor of pharmacology, College of Physicians and Surgeons, Columbia University; Dr. John B. Youmans, Dean, Medical School, University of Illinois.

Sex Hormones and Advertising

THE Federal Trade Commission recently issued Cease and Desist Order No. 4968 against the advertising of medicinal preparations containing male and female sex hormones. The order directed the respondent to "stop advertising the drugs unless the advertisements disclose that their unsupervised use by persons not skilled in the diagnosis and treatment of hormone deficiency conditions may result in serious injuries to health." The findings as to the facts refer to the products as "very potent," and state further that "They should not be administered, however, unless an actual need for them has been established by a thorough, physical examination, a careful history inventory, and laboratory tests designed to explore the individual patient's functional capacity, and should be used then only upon a prescription and under constant specialized medical supervision. The indiscriminate and continued use of the drugs may produce an unfavorable influence upon the highly sensitized reproductive tissues, a disturbance of the menstrual and other reproductive functions, and temporary or permanent sterility, resulting in serious disturbances to the sex life of an individual, and other serious injuries. The respondent's failure to disclose in his advertisements these hazards to health implies that the preparations may be taken under customary and usual conditions or supervision."

Cream-Oil Hair Tonics

WE HEAR that the biggest thing in hair dressing preparations is Wildroot Cream-Oil, which is the preparation without alcohol brought out during the war when alcohol was very much restricted. This product, which states on its label that it "removes dryness, removes loose dandruff," is said to account now for twenty-five percent of the hair tonic market. We hear that others are aiming at the spot that is occupied by Wildroot Cream Hair Tonic. Bristol-Myers are said to have a similar type of preparation called Sentry, and Kreml are reported to have another. It appears that the style in hair tonic has changed due to a wartime shortage of alcohol.

How to Stop the Antivivisectionists

THE British have taken a real crack at the antivivisection movement in their country by denying that the societies are charitable organizations for the public benefit. In Britain the antivivisection societies claimed that funds contributed for this purpose should be exempt from taxation because they were given for the public benefit. The claim was denied by the tax commissioners who were supported by the courts. Appeal was made to Britain's highest court, the House of Lords which upheld by four to one the contention of the tax commissioners. The Law Lords decided that far from being for the public welfare, the object of the antivivisection movement was gravely injurious because, if achieved, it would be detrimental to medical science and research, and consequently to the public health. Since the continuation of the movement depends upon public subscriptions, contributions, and bequests, such a ruling is a real body blow to the antivivisectionists. As the Journal of the American Medical Association says: "When the money runs out, the salaried executive secretaries who promote the movement will lose interest and disappear."

New Penicillin Salt for Delayed Action

PROCAINE penicillin, a crystalline water insoluble salt of procaine and penicillin, has been developed by Chas. Pfizer & Co. for the purpose of delaying the absorption of penicillin when injected. It is claimed that use of procaine penicillin in oil indicates that a single intramuscular injection of 300,000 units in man results in detectable penicillin blood levels lasting twenty-four to forty-eight hours. Commercial availability of the product must await completion of extensive clinical trials now in progress, but it is anticipated that the preliminary work will be substantiated, and that the product will make available a more satisfactory method of penicillin therapy.

Retirement by Fixed Age Limit

COMPULSORY retirement by 1980 of all workers 45 years of age or older is predicted by Dr. Theodore G. Klumpp, president of Winthrop-Stearns, if the present system in this country is maintained of "pensioning off faithful retainers" solely on the basis of calendar age. In a recent address before the New Haven Medical Society Dr. Klumpp stated that the weight of our population is shifting toward the older group and that we cannot persist in dumping workers into the "old age boneyard" when they reach a fixed age or we will have a severe economic dislocation with a potential labor surplus of 30 million workers by 1980. "In light of the all-time employment record of almost 60 million gainfully employed which has recently been attained," said Dr. Klumpp, "in less than 33 years we shall have more individuals over 45 than the total number employed at the present time." Charges that advanced age were synonymous with over-conservatism and stultification of progress were termed "illogical generalizations." "Certainly Bernard Baruch, 77 years of age, Serge Koussevitzky, 73, Arturo Toscanini, age 80, Herbert Hoover at 73, and Nicholas Murray Butler, at 85, are not obstacles in the path of progress. And neither Senator Pepper, Henry Wallace, nor Tommy Manville has become more conservative as they have grown older." Dr. Klumpp prefers a successive reduction of working hours to reducing more and more older workers to a state of parasitism. He predicts a thirty hour week within a generation. Dr. Klumpp believes that retiring, like hiring, should be selective and based on fitness to do a given job. He thinks that compulsory retirement should be based on the recommendation of a retirement board composed of medical and psychiatric members as well as administrative officials, and that opportunities for down grading in position and salary should be offered the aging worker, just as the young apprentice works himself up in skill.

Streptomycin Production Climbs Again

STREPTOMYCIN production hit another record figure in September when 1,041,000 grams were produced, an increase of approximately 20 per cent above the August figure. Because of this increase, the October export quota was advanced to 600,000 grams, from 400,000 grams for September.

Shampoo Advertising Conference Refused

A SHAMPOO manufacturer against whom a complaint was filed by the Federal Trade Commission concerning the manufacturer's advertising, requested the Commission to call a trade practice conference of all shampoo manufacturers. The request was refused, one of the Commissioners stating that such a conference would be "impractical and confusing" because of the fact that most of the preparations would have different formulae, and the advertising would be different, producing a different sales approach. Consequently, felt the Commissioner, each case should be tried on its merits. In the face of this refusal we wonder how the Commission can justify the calling of any trade practice conferences where advertising is concerned. Similarly we wonder how the Commission can justify the calling of the cosmetic conference which certainly resulted in confusion because those attending sold all sorts of different products and used all sorts of different merchandising methods. Certainly there was a large number of manufacturers present at that conference who admitted frankly that they were more confused than ever as the result of the conference.

Sterling Moves Stearns

STERLING Drug is moving its Frederick Stearns & Company Division from Detroit into a smaller plant in Myerstown, Pennsylvania, which plant Sterling bought from the Burry Biscuit Company. The reason is that the Stearns Division needs much less space than the 350,000 square feet divided among several buildings in Detroit. The newly acquired plant has only 85,000 square feet of space. The main reason why less space is needed is the recent sale of the Nyal Company to the Heyden Chemical Company. Nyal products were formerly made in the Stearns plant.

Merck to Receive Chemical Engineering Award

MERCK & CO. has been selected to receive the eighth biennial Award for Chemical Engineering Achievement, sponsored since 1933 by the magazine, Chemical Engineering. George W. Merck, president of the company, will receive the award on behalf of his associates at a dinner to be given Wednesday evening, December 3, at the Waldorf-Astoria Hotel. The committee, composed of more than fifty leading educators in the field of chemical engineering, makes this award to Merck & Co. for pioneering the large-scale production of streptomycin and other vital medicinals. It also recognizes personnel policies and practices which have encouraged Merck's chemical engineers to participate in all phases of the company's rapidly growing business and industry.

The Pharmacist Shortage

THE shortage of trained pharmacists in this country as well as teachers, researchers, and in drug stores, is desperate and demands a solution, according to Dr. E. L. Newcomb, executive secretary of the National Wholesale Druggists' Association. Dr. Newcomb recently spoke to the National Association of Retail Druggists and appealed to retail druggists to support the work of the American Foundation for Pharmaceutical Education, the primary objective of which is to provide funds to the sixty-five accredited schools of pharmacy to be distributed as Fellowships to students pursuing graduate courses in pharmaceutical subjects. "World War II not only depleted the ranks of our undergraduate bodies but also depleted teaching staffs and enrollment of graduate students," said Dr. Newcomb, "Our Foundation conducted surveys and we learned that our colleges of pharmacy would need a total of 500 teachers within ten years, and more than 100 were needed immediately. At the same time we learned that the pharmaceutical research laboratories were in desperate need of 167 men with a Ph.D. degree in pharmacy and its allied subjects. They, too, have an overall shortage of 500 trained men." Since the Foundation was formed in 1943, a total of $1,360,000 has been contributed to date.

Cosmetic Irritation and Allergy Study

THE Toilet Goods Association has made a "substantial grant" to the Laboratory of Applied Physiology of Yale University, to be used for a thorough review of existing literature on skin irritation, allergy and sensitivity induced by perfumes, cosmetics, and other toilet preparations including soap. The program calls for preparation of abstracts of literature on the irritating effects of these products and a most comprehensive list of raw materials used in their manufacture. When this tremendous task of abstracting is completed, a critical review of the subject will be published as a monograph by the Laboratory of Applied Physiology. In addition to the abstracts, this monograph will contain an analysis and evaluation of the literature covering the entire field. The abstracts are expected to be in such form that interested persons will be able quickly to secure a record of any product or raw material. It is thought that the abstracting will take about one year's time, and that the preparation and publication of the book will take most of another year.

FTC Advertising Requirements

THE Federal Trade Commission announced early this month that it will not require disclosure in advertising that, under certain conditions, injury may result from the use of laxatives, or preparations containing iodides, acerophenetidin or up to five per cent of ammoniated mercury, unless scientific information becomes more specific as to substantial injury. The Commission declares that the decision is in line with its policy announced last December to require such information "only when the resulting dangers may be serious or the public health may be impaired."

Undulant Fever on the Increase

UNDULANT fever may become number one communicable disease in this country within a few years, outranking tuberculosis, syphylis, and gonorrhea, according to Dr. Thurman B. Rice, of Indianapolis, writing in Hygeia, the A.M.A. lay magazine. Undulant fever is at present fourth among communicable diseases, but higher-ranking tuberculosis, syphylis, and gonorrhea are better controlled, he says. There is substantial evidence that swine, rather than dairy cattle, are responsible for as much as seventy per cent of human infection, according to Dr. Rice.

Depilatory Patent Decision Upheld

PROOF that a composition cosmetic patent can be successfully defended has been had in a unanimous decision handed down by the U. S. Circuit Court of Appeals for the Fourth Circuit upholding the decision of U. S. District Court Judge Coleman that Patent No. 2,352,524, covering the use of substituted mercaptans in depilatories is valid. The 16 page decision, written by Judge Dobie, completely sustained the lower court. This is the patent held by Ralph L. Evans and Everett C. McDonough. Licencees under the patent at the time of the suit were Schering, who produce "Imra," and Hall & Ruckel, who produce "X-Bazin." Infringers at the time of the original suit were Carter Products, who produce "Nair," and Elizabeth Arden, who produces "Sleek," However, since the time of the District Court decision, Elizabeth Arden has applied for, and has been granted a license under the patent to produce "Sleek." Therefore, the appeal was made by Carter Products. "Imra" is under an exclusive license in the mercapto carboxylic acid (thioglycolic acid) depilatory field; "Sleek" is licensed for depilatories made with mercaptans such as thioglycerol; and X-Bazin is also licensed for thioglycerol. The patent covers compositions made with mercaptans at a specific concentration and pH range.

Chains Want Wholesaler Discounts

CLAIMING that drug chains "are gravely concerned over the decline in net profits," Harry S. Sylk, president of the Sun Ray Drug Company, Philadelphia, urged chain drug groups to press manufacturers for the "same discounts offered wholesalers and syndicate outlets" and for "bonus deals as good as those offered independents." Addressing the fall meeting of the Affiliated Drug Stores in New York, Mr. Sylk produced a list which he said contained the names of two hundred manufacturers which grant wholesalers a larger discount than they give to the chains.

A.M.A. Studying Cosmetics

THE American Medical Association is seeking information concerning cosmetics, and recently the Council on Pharmacy and Chemistry of the AMA sent letters to a large number of cosmetic manufacturers asking for information regarding the products of these companies. The letters, which were on the stationary of the Council on Pharmacy and Chemistry, read as follows:

"The Committee on Cosmetics of the American Medical Association is accumulating a complete file on information on cosmetics currently used. This effort is prompted by the ever increasing number of inquiries we are receiving from the medical profession and related fields on the composition and possible toxic properties of cosmetic preparations.

"May we have the privilege of receiving a list of your products with a narrative review of their chemical nature and such information on their properties as has been derived from animal and human experimentation. We would be pleased to receive samples of any products in addition to the above information.

"Be assured that any information relating to quantitative statements will be considered strictly confidential if so requested. Your cooperation in this matter will be of service to the Committee on Cosmetics of the American Medical Association."

The letters were signed by Veronica L. Conley, A.B., M.N., Corresponding Secretary, Committee on Cosmetics.

For many long years we have noticed and reported upon the apparent desire of the American Medical Association to extend its control to cosmetics. Now the Association is apparently coming directly into the open and making an attempt to establish some sort of control with the aid of the manufacturers themselves. There is a good reason why the AMA should be interested in cosmetics so far as allergic reactions are concerned because many of the cases of allergy come before the doctors. However, there is no reason why the AMA should establish any sort of control over the manufacturers of cosmetics generally, and this must be avoided by the industry. Certainly, if the AMA should eventually develop this undertaking to the point of offering a Seal of Approval to those manufacturers whose products are acceptable to the Council and the manufacturers of which obey the rules which the Council drafts, manufacturers in this industry should avoid publicizing that Seal at all costs. Manufacturers of cosmetics should realize that in going whole hog with the AMA and educating the public to this fact, they are merely helping to build up a control over themselves of dictator form, which control will plague them later on when it is firmly established.

Vitamin Deficiencies Still Prevalent

ALTHOUGH the attacks upon the use of vitamins continue to be made along with the claim that people in this country have balanced diets and get all the vitamins they need in their daily food intake, Doctors of the U. S. Public Health Service pointed out only last month that vitamin deficiency diseases, anemia, goiter, and rickets, constitute a major health problem in at least four areas of this country. Physical signs commonly associated with these deficiencies in the diet are prevalent in each of the areas studied—Southwest, Mid-Atlantic, New England, and North Central—according to Dr. Harold R. Stanstead and Dr. Elton S. Osborne Jr., of the U. S. Public Health Service. Approximately 25,000 persons, including school children, occupational groups, and families, were inspected by mobile field units. In order to determine the nutritional status of each person, a record of what they ate, laboratory tests, and a physical examination were made. In more than 1,800 white school children in Maryland and Michigan, 47 per cent in the Michigan grade schools, and 46 per cent of the high school students had enlargement of glands in the lining of the eyelids and covering of the eyeball which is generally associated with vitamin A deficiency. In two Maryland schools this condition was prevalent to the extent of 28 per cent and 23 per cent while in all others combined it was only 2 per cent. Vitamin B complex deficiencies and vitamin C deficiences were also noted in that some children suffered from several tongue conditions and inflamed gums. Among negro families, vitamin A and C deficiencies were very frequent, with almost as high a prevalence among the white families.

PRESS ASSOCIATION

World Economy and the Industry

NO MATTER how much the people of this country try to get away from it, our economy is closely tied in with the economic situation of other nations of the world and with the economic situation of the world as a whole. Every industry in this country is trying its level best to sell more goods both here and abroad, but the more they attempt to sell more goods abroad, the more do they realize the dependence of our economy upon the economies of foreign nations. The great majority of the people of this nation do not run into this situation as individuals, and therefore this large majority are of the opinion that we are self-sufficient and that we can go along in our usual placid way with a very high standard of living and ignore conditions of other nations. But the heads of the heavy industries and the heads of other industries know better.

For many long years the heads of our large heavy industries, who were doing business in a large way in other countries of the world, realized that welfare abroad was essential to continued welfare here. Under the present circumstances, manufacturers in this industry who have tried to expand their operations into other countries of the world, have been taught this lesson. They now know that these people in other countries must be able to produce the things which they need; must be able to produce things that we are willing to take in exchange for the things which they need; or they must go without unless we, or some other nation are willing to give these things to them. They also know very definitely that export cannot be a one way street, but that there must be an actual exchange of goods so that the importer from any country does not run out of money with which to buy. For if the importer from any country runs out of money, exports from this country must stop or our government must give him the money—this money in turn coming out of the pockets of everybody in this country in the form of taxes.

The world will never be at peace with one or a few countries having everything that they want, and other nations having very little. The situation may resemble peace in that there is no actual war being fought, but it can only be, in effect an armed truce with the stronger nations holding the weaker ones in place until such time as these weaker nations become strong through hard work and through relaxation upon the part of the stronger nations. The world was not really at peace between the two world wars for the reason that the nations defeated in the first world war were merely waiting until they were strong enough to avenge the defeat of the first world war and get their world power back. That they failed a second time will not deter them from trying it again if they believe they have a chance of success. Never will the nations of the world be at real peace with one another until such time as all nations can obtain all the things that they want and all have a very high standard of living.

The average individual in this or any other industry will wonder just what this has to do with him. All he hears about is the fight for world control between this nation and Russia. He is told that he must bear heavy taxes to feed and equip the nations of the world so that they will not be taken over by Russia and converted to her way of thinking. How Russia actually thinks is not so important as whether the large majority of the people of the world will think her way and then will back up their agreement with Russia to the extent that they are willing to fight for it, even though they might be forced into this position of fighting for it.

In the meantime this nation is being told that it must continue to supply foreign nations with the things that they need, and a large part of these needs are the products of this industry—particularly the products of the drug branch of this industry. Manufacturers in this industry are straining to produce as much goods as they can to supply demand both here and abroad. Manufacturers in other industries are doing the same thing. The government must fit into the picture in an effort to bolster dollar credits abroad so that the manufacturers here can receive payment for the goods which they ship to the foreign nations who have not sufficient goods to export to this country to pay for the goods which they need.

The strain upon practically all the industries in this country is very heavy. The facilities of this nation are naturally limited when an attempt is made to supply an extremely large part of the world which normally supplied itself or was supplied by other nations than our own. Our basic industries are particularly strained. The alkali industry has been overburdened for many reasons, but as one example this industry has been strained by the heavy demand for glass abroad as the result of the bombings during the war. To expand the alkali industry capacity in this country to meet this abnormal demand would be foolish for the reason that the demand is temporary and, within a comparatively short space of time, the alkali industry in this country would be greatly over-produced with many idle plants on its hands—plants which were built at extremely high costs. The same applies to many other industries in this country. Furthermore, the countries which are now sorely in need of many things from this country will, in a comparatively short space of time, be back on their feet as producers of many of the things which they are now obtaining from us. This eventual return to production by the countries abroad is just another reason why we cannot and must not expand our facilities too rapidly at the present time.

This country is operating at an all-time high rate of production of both manufactured and natural products. Our national income is at an all-time high. However, a high rate of national income is essential to support the huge national debt with which we are saddled as the re-

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BLACK STAR

CLINIC for COSMETICS

THE marketing of cosmetics has long been associated with that of medicines in the same system of distribution. Many of the best known cosmetic trademarks are owned by, or closely associated with, leading interests in the proprietary or pharmaceutical business. It is interesting, for this reason, to speculate on the reason why some cosmetic manufacturer has not found a way to use the marketing method, or some adaptation of it, which has proved so spectacularly successful in the last twenty years for the sale of medicines. This method, clearly gaining predominance in medicine marketing, is the clinical, or ethical procedure.

A new cosmetic is offered to the retail trade and accepted because the manufacturer is well known and has a favorable reputation; or because it is backed by ef-

fective advertising and promotions; or because it has some distinctive sales appeal which will, in retail opinion, attract favorable public notice. It is rare that a new cosmetic, which may have some new value, or a cosmetic depending on some long established value, is offered to the retail trade with any authentic data on usage to prove its worth.

This lack of clinical information or pre-testing in the industry may well exist because the retailer has shown very little interest in any such procedure. But it may also be said that no leading manufacturer has properly explored this procedure and aggressively promoted it to the retailer to test his reaction. And it may also be said that in at least 60 per cent of cosmetic distribution —that is the independent druggist and the chain—this procedure is recognized, respected, and is every day becoming more dominant.

The manufacturer of a new medicine which may involve new treatment, or a combination of previously known medicinal values, can present data from reputable, recognized sources which at least overcome the normal uncertainty which greets a new product. Clinical evidence gives a firm foundation for advertising and direct selling. The salesman's approach to the retailer, as well as the doctor, is first of all on a professional basis.

It is not true to say that cosmetic manufacturers have entirely ignored this system of marketing. A number of small enterprises, very few with professional zeal or reputation, have tried it. Some have tried to glamourize the method. One, at least, that is Almay, has been consciously professional and ethical, and with a small organization has established a firm place in the industry.

In exploring a marketing method such as this, there is no need for the cosmetic industry to confine itself rigidly to the ethical and clinical procedure of the pharmaceutical manufacturer. It may not be possible for many cosmetic products. There are, however, many variations open to the cosmetic manufacturer. Since this is a method, which is basically to establish certain definite cosmetic values by usage under close observation, these variations should be worth notice.

Two fields allied to the retail cosmetic business have long offered the cosmetic manufacturer a magnificent opportunity for laying a solid foundation of clinical experience and case histories of consumer approval and acceptance. These two are the beauty parlor and the barber shop industries.

Both of these large service industries are tremendous users of cosmetic products in professional treatment. Each could provide a vast laboratory for observation on the value of the product, for effective cosmetic treatment, and for consumer response.

These two service industries provide many serious problems in marketing. Both are filled with a considerable number of manufacturers who are thoroughly able to offer intense competition to a newcomer. It would not be easy to use them as clinical testing grounds.

It has been done, and with conspicuous success by a few companies. Revlon, more than any other cosmetic company, once proved beyond any argument that an accepted position in the beauty parlor field, and the application of nail enamel in professional establishments is a quick avenue to retail and consumer acceptance of a retail package.

Although these two service industries are so tight in their competitive struggle, so involved in selling techniques all their own, it doesn't at all follow that a well thought out program cannot find a place here. Either locally, or sectionally or through some alert distributor, a way can be found. It really depends on whether the cosmetic product is worth it.

A few months ago, in our article on selling cosmetics there was some discussion of the retail store case history as a method of introducing a new cosmetic. In this discussion, the case history of sales in a single retail store was considered only from a marketing viewpoint leading to expanding distribution.

It would be interesting to consider a retailer as a clinic. A reputable, friendly retailer can offer a manufacturer far more than the volume of sales produced in his store. This industry uses the nationally known, fashion department stores as focal points of prestige, not only for a wide, sectional audience of consumers, but for prestige with other retailers. The influence of these stores, because of their willingness to feature the manufacturers' goods and associate them with the store name, goes far beyond the clientele of the store.

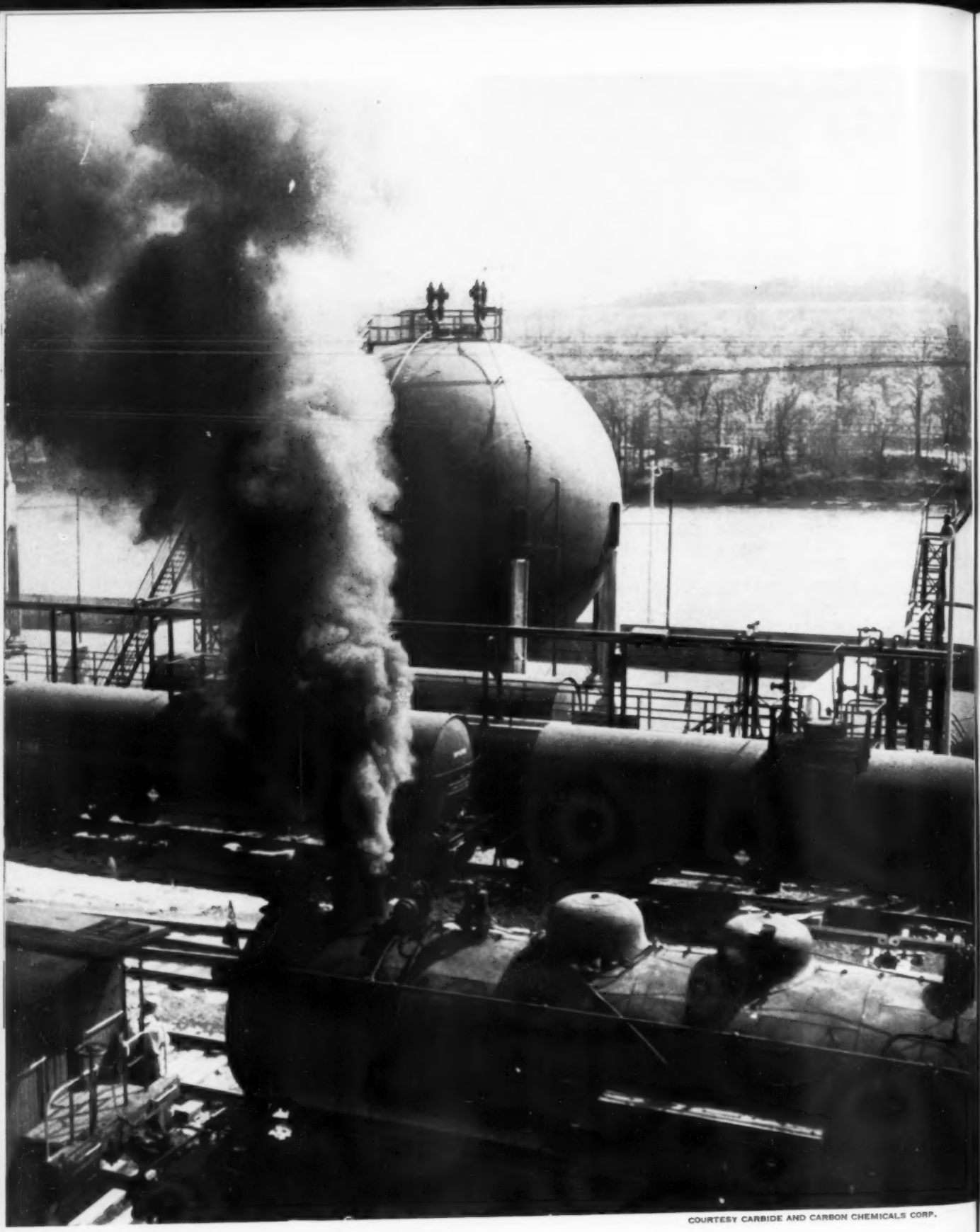
Since it is an accepted and normal method of growth for a class cosmetic manufacturer to use leading retailers in this manner—that is as a case history of sales success—why not include a clinical record?

Many cosmetic manufacturers have a demonstrator in a friendly store with a reputable name. Many, undoubtedly, have a substantial record of reports that might be considered clinical evidence. But how many have planned a procedure that would be accepted, let's say in new territories and by other retailers as a clinical report. How many have followed up sales, after a lapse of usage, interviewed these consumers, checked carefully and scientifically as to their opinion of the product, its ability to perform as the manufacturer expects.

There could be a professional procedure, operating through a good retail store, with the store's cooperation. These findings could be reduced to a professional report, made authentic by the store.

To few cosmetic manufacturers will any method of this sort appeal. It means delay—apparently standing still for several months. We are all too impressed with the glamor of rapid and spectacular growths in the industry. And as a result, we fail to notice the vast majority who start with a spurt and falter, or who plug along in a big competitive scramble with little to offer not possessed by a hundred others.

The good merchandisers know how to build records of sales success in known stores as a stepping-stone for further building. Why not add to this, as a new asset for the cosmetic industry, a clinical procedure that will just as effectively demonstrate the value of the cosmetic in performing a wanted function.



COURTESY CARBIDE AND CARBON CHEMICALS CORP.

ALCOHOL SHORT AGAIN

THE alcohol situation is confusing and uncertain with a definite shortage now at hand. The reasons for the shortage are several. In the first place there is not sufficient molasses for the production of the alcohol for which a demand exists. In the second place there is very little synthetic alcohol available on the market. The output of the plant of one oil company making synthetic ethyl alcohol has been under contract to one large user ever since the plant was erected during the war. The other maker of synthetic alcohol figures how to get the most for the ethylene it produces and sells the greatest part of it in the forms of chemicals other than alcohol, thereby getting a greater return.

Then there is a terrific shortage of anti-freeze for the reason that methanol is in very short supply. This is because one large maker of methanol had an explosion in his plant which seriously hurt the supply picture. Then the demand for methanol for formaldehyde and other things is much heavier than it ever was before. Therefore, there has been a terrific scramble for supplies of anti-freeze and this has had its part in balling up the ethyl alcohol situation.

It is, perhaps, only natural that the industries producing basic products such as alcohol should be in a tight position. After all, there have been practically no new plants erected since before the war, and since that time we had a large population increase, steady demand at levels never before thought possible, and heavy export demands. The alkali industry, and many other industries are in a similar predicament. The heads of the companies in the field do not, for the most part, see their way clear to increase their facilities. If new plants were erected today, they would cost about twice what the old ones did, and then there is no guarantee that within a comparatively few years, demand might not vanish to a considerable extent making these high-priced plants real headaches to the companies who built them. If a manufacturer were to start to erect a plant now he could not be certain when the plant would be finished or exactly what the cost would be.

With the Government handling all the molasses and selling it by sealed bids, some of the manufacturers have been caught short at various times because their bids were not high enough and the molasses offered went to a competitor. The Government has also bought from Cuba large quantities of alcohol, but this is not of the quality that the distillers here want. Furthermore, they do not exactly cotton to the idea of buying alcohol when they are in business to make it. The Government has only 7,000,000 gallons of this alcohol to sell, and only 9,000,000 gallons of molasses to be delivered against the contract with the Cuban Government. The present plans call for the RFC of the Government to be out of this business completely within a few months.

When it is realized that prices of molasses before the war were somewhere in the neighborhood of 5 cents a gallon, today's prices appear fantastic. The all-high price was received last April when 34.32 cents per gallon was paid. RFC sold molasses on October 30 at 29.05 cents per gallon. Early this month 31.02 cents was paid for another lot. A cargo of 1,800,000 gallons is arriving about the middle of this month, and 1,400,000 gallons is arriving in the latter part of this month. On seventy-seven sealed bids to date, RFC sold 122,100,000 gallons of molasses. Earlier sales against allocations bring the total of disposals to date to 138,000,000 gallons. When RFC sales are completed, it will have sold an aggregate of 147,000,000 gallons. Of this total 111,500,000 gallons were bought from Cuba, and 35,500,000 gallons from Puerto Rico, the Dominican Republic and Haiti.

While production of ethyl alcohol during September was 29,905,611, proof gallons, which is more than 12,000,000 gallons greater than September, 1946, demand this year for anti-freeze is so heavy that less will be available for industrial users during the remainder of the year. In addition, the Government stockpile is estimated to have declined somewhere between 7 and 8 million gallons. A strong shift from corn took place as the result of the high prices. Only 3,967,047 pounds of corn were used in September compared with 27,393,376 pounds used last July and a monthly rate for the fiscal year ending June 30 of more than 35,000,000 pounds. New crop potatoes are now available as an alcohol raw material. Potatoes consumed by alcohol producers during September totaled 58,374,330 pounds, while in July only 215,800 pounds were used. Molasses consumption as an alcohol raw material has been greater than previously. Sorghum grain and sorghum grain products consumption has also taken a sharp jump. September consumption totaled 17,694,939 pounds, against only 4,615,825 pounds consumed in July. Use of sulfite liquors also rose in September to 20,074,730 gallons compared to August consumption of about 15 million gallons, and a July figure of slightly over 11 million gallons.

Producers are of the opinion that the situation will right itself sometime during the first six months of 1948. This is for the reason that new methanol facilities will

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HAIR DRESSING

By H. HILFER

HAIR dressings have been always popular cosmetic stand-bys because of their universal appeal for good grooming among both men and women. There are many different types available dependent upon the effect desired—from straight oil preparations to straight gum solutions—so that a "wet" appearance or a "dry" appearance may be imparted to the hair with all the variations in between.

Mineral oil has been the old stand-by for the oil type of hair grooming and many preparations have been and are on the market which are wholly mineral oil with the exception of a small percentage of essential oils to impart the desired odor. The gum types which impart a well groomed "dry" effect upon the hair consist of mucilages in which quince seed, gum karaya, gum tragacanth, or other gums are used either by themselves, or in conjunction with one another. Their function is the same—that is to impart to the hair the property of allowing the hairs to cling to each other by means of a thin, almost invisible coating. The claim has been made that of all of the gums, quince seed mucilage is the best adaptable because of the smaller percentage required for the given effect. (This percentage is based on the quantity actually incorporated in the final aqueous medium—not on the original weight of seeds used to form the mucilage.) In this case the quantity needed is so small that there does not appear to be any residue left on the hair after application of the solution and subsequent drying.

Between these two extremes, one "wet" and the other "dry," there are being sold some four or five classifications which come in between. We shall treat these in their own turns. Going from the "dry" to the "wet," the first thing on the list would be the oil-in-water emulsions containing a small amount of incorporated oils and waxes which make it possible to cause the hair strands to adhere to each other after application of the liquid emulsion and combing of the hair. This type has become popular in recent years because of its ease in using and because it fulfills the function of leaving the hair relatively dry. In addition the emulsion has a low viscosity making it easy to pour and is of good appearance in the bottle. Though there are many different formulae which may be used in making this type of preparation, generally speaking, triethanolamine stearate, glycerol mono stearate lotion, in which has been incorporated from five to ten per cent of mineral oil, will do the job. After application and combing the water will evaporate off leaving a substantially invisible film which serves as the adhering agent.

It is possible to formulate such a product so that it will have the required emulsion stability and the proper viscosity demanded. Due attention should be paid to the optimum amount of glyceryl monostearate used since too high a quantity will tend to foam, producing an undesirable whitening effect on the hair. One way of overcoming this tendency is by the introduction of glycerol or alcohol, and another is by using in conjunction with glycerol monostearate small amounts of propyleneglycol monostearate or propyleneglycol monolaurate

both of which have a tendency to overcome the foaming and at the same time reduce the viscosity of the emulsion. The materials mentioned here are by no means complete since there are now available sorbitan esters which may be used to advantage in such a preparation, and other esters with hydrophylic properties are now available.

Another well-known type of hair dressing is the alcoholic solution of an oil which accomplishes the same effect. The most common of this type is the castor oil, alcohol solution which, after application, dries to impart a semi-glossy film which serves a good purpose as a medium by which the hair strands may be made to cling to each other. As can readily be seen, application to the hair of castor oil by itself cannot be controlled as well as could a diluted solution of it since a greater mechanical effort would be necessary to spread one cubic centimeter through the hair than would be required to spread 10 cc. of a 10 per cent alcoholic solution of it. Even if the differences in viscosity are disregarded, it would require at least ten times the effort, and therefore the advantages of the solution can readily be appreciated. In addition to all of which castor oil is the one natural fixed oil which is soluble in alcohol in all proportions and therefore fits into this type of formulation very nicely. Other materials such as some synthetic esters of fatty acids may be used as well but there are not many commercially available which can compete with castor oil in price. The castor oil, alcohol vehicle therefore becomes an easy method for the addition of the oil to the hair in controllable quantities.

During the past war when many of the materials we took for granted were taken away from us for use in other fields, new forms were developed so that the final function could be carried through with materials which were available. One of these forms has already been described—that is the oil-in-water emulsion referred to in the first part of this article. Other forms were also developed. Probably the most popular one is the water-in-oil emulsion in liquid form which, to all appearances, has swept the market and is still retaining its popularity. The development of this product was due primarily to the alcohol shortage during the war and in no small portion to the development by some of leading chemical manufacturers of esters with marked hydrophylic properties which could be more or less made to order to fit any particular emulsification problem. Since no one agency is responsible here (as there are a number of products available which compete in function if not in chemical identity) examples that will be used in the description of these materials are meant only as examples and not as a complete description of agents that may be used. To describe an all inclusive list is outside the scope of this article and really a subject which should be treated by itself.

The example which will be used in this article is sorbitan sesquioleate, a good emulsifying agent for water-in-oil emulsions. By its use it is possible to formulate stable water-in-oil emulsions with low viscosities. Generally speaking the larger the percentage of the aqueous phase in a water-in-oil system, the greater does the viscosity of the emulsion become since water in this case is the dispersed phase and the greater the crowding of the colloidal particles in the dispersed phase, the stiffer does the emulsion become. Compounds of the sorbitan sesquioleate type, however, have a tendency to be able to keep the system mobile even with relatively large amounts of water in a water-in-oil system. These emulsions may have as much as sixty-five per cent and still remain mobile. Materials used in the external or continous phase may consist in addition to mineral oil, of absorption bases, lanolin, and even beeswax. If beeswax is used, borax is very often used with it to help stabilize the emulsion. Such a colloidal system is extremely complicated as regards the physico chemical forces which come into play, and therefore the preparation is difficult to formulate strictly according to rules. The pH of the aqueous phase has a tremendous bearing on the final result and it has been my experience to see at least one preparation where there is a stoichiometric excess of alkali over the free fatty acid present as a means of stabilizing the emulsion. Such a phenomenon is so completely against the rules that it would seem that the rules are far from being infallible. When such a condition exists, anything done may work and it would therefore be best to say that the emulsion may be made from the materials listed above but with vari-

(*Continued on page 705*)

DOES LOTS MORE THAN KEEP HAIR Looking Handsome
With hair like this, you'll hear:
"hello, handsome"
Vitalis and the "60-Second Workout"
to stimulate scalp...keep hair handsome
IS YOUR HAIR SO DRY 'IT BREAKS AND FALLS?
KREML HAIR TONIC

N.W.D.A. MEETING

THE annual meeting of the National Wholesale Druggists' Association, held at Atlantic City last month, was one of the most successful meetings ever held by this association in long history. Over eleven hundred people were in attendance, and the business sessions of the meeting were extremely interesting.

George W. Kauffman, Kauffman-Lattimer Company, Columbus, stated that immediate action "to find operational savings to compensate for higher costs" was made necessary by the expected implementation of the Marshall plan in the near future, which means that "this cycle of foreign aid and relief, material shortages, high prices and fat pay envelopes will probably continue for some time to come. There is a sleeper in this cycle which may pack a terrific wallop in the next twelve months for those of us who have to keep filling those pay envelopes—that is, the annual fight for increased wages.

"As big business increases its wage scales and the cost-of-living index moves up a few more points, the problem comes right back to our doorstep in the increased cost of living to our employees. Working on fixed gross margins as we do, we cannot arbitrarily raise our prices to cover higher operating costs. So far two factors have enabled us to meet higher wage scales and higher operating costs—heavy sales volume and the fact that customers are ordering items in larger quantities than ever before in history."

Whether or not these factors will continue to offset present high costs of operation is described as a "sales problem and an uncertain gamble." Four immediate steps suggested were: Study operational costs and eliminate the weak spots; establish production and performance standards for employees; find new ways of doing old jobs better and more economically; frequent exchange of information and ideas with others in the same field.

The Board of Control of the association drafted a resolution appropriating additional funds to continue its research program to develop efficient distribution and selling methods as a means toward offsetting increased costs of operation so as to keep the corner drug store an "island of low prices in the inflationary sea."

"Both as a matter of continuing public service as well as an effective insurance policy on our future markets and business health, we intend to continue our efforts in fighting unnecessary price increases," said Harold M. Altshul, chairman of the NWDA committee on distribution. He declared that the drug industry should take "full page space in every newspaper in the land" until the fact that drug prices have risen only 3.1 per cent since before the war is "blazoned in the heart and head of every American consumer." Mr. Altshul said that wholesale prices are determined chiefly by "external influences, such as retail buying habits and more particularly manufacturer programs. Wholesalers cannot achieve a full measure of success in cost control and reduction without the real understanding and active participation of a majority of suppliers." He emphasized what he termed "the urgent need for standardization of manufacturer practices."

W. J. MOONEY

Mr. Altshul spoke of the complexity of wholesale

drug operations, pointing out that its range "covers 25,000 to 75,000 items, procured from 1,500 to 2,000 suppliers, varying from fly-speck to car-load shipments and from biologicals to chocolate syrup, with daily operations of even the smallest houses requiring the constant handling of literally thousands of repetitious details. The tremendous variations that exist among manufacturers' distribution programs create a major stumbling block to wholesaler efforts to increase distribution efficiency." Wholesale pricing departments are required to discount different items at rates ranging from one per cent to as high as twenty-seven per cent, he said. "The slow-down and confusion resulting from this multiplicity of discounts substantially increases pricing costs. Tying together resale discounts and quantities on which they are given, the chaos created is not only undesirable but downright unnecessary. If a discount schedule of five per cent inclusive of cash on a shelf carton and seven and one-half per cent inclusive of cash on a shipping case is adequate to serve the purpose of one manufacturer of a fast-moving, over-the-counter proprietary, there is no obvious reason why it would not adequately serve others in the same category."

Mr. Altshul pointed out that "many problems in packaging remain to plague the wholesale druggist." He cited the following: Packing of products in shipping cases of two or more different sizes; inadequate marking of cases; endless variety of names for different sizes, such as family, economy, dispensing, giant, hospital, and the like. The handling of "free goods" constitute another major source of distribution expense, according to Mr. Altshul, who said that a recent count in a wholesale drug establishment revealed 72 different and separate types of free goods forms or routine provided by manufacturers. Free goods should be shipped with order by manufacturers, he said, since other methods results in a waste of time and money. "For their own self-interest, manufacturers should begin at once the necessary processes of simplification and standardization that will enable wholesale druggists to achieve the ultimate in cost reduction," he concluded.

Retiring President Charles C. Caruso, of Schieffelin & Company, spoke of the rise of only 3.1 per cent in retail drug prices as compared to a rise of 59.3 per cent in all other cost-of-living items. "How long the drug industry can hold out against such increases all about them is a serious question," he said, maintaining that with respect to prices consumers generally are "still unaware of the outstanding achievement of our industry in serving the public health at a cost that is nearly the same as before the war." Mr. Caruso urged "high government officials, news commentators, and others who have the public ear, to give credit where credit is due. Let them give a comforting word to the public by citing the soundness and fairness of the drug industry. Let them silence once and for all the critics of fair trade laws. What the drug industry has done is a practical demonstration of the value of these laws, which, effective in 45 of the 48 states, permit producers to make contracts with distributors setting a fair minimum price on brand name and trade-mark items.

"If by their wise and proper use, these fair trade laws have brought about a market stabilization that has enabled the drug industry to contribute so much in this period of stress in the national economy, why do not these public servants urge other industries to follow suit? This might provide the break we are looking for to check the spiral of inflation and bring about for all commodities and all industries the long desired and necessary price and wage stabilization."

Mr. Caruso also pictured the wholesale druggists as "fighting valiantly" against spiraling operating costs by applying results of completed NWDA research projects on wholesale operations, sales and sales direction, and personnel and job evaluation. "Research seeking improvement in internal operations is continuing," he said, "New mechanical equipment for filling orders is being introduced. Some modernization of service wholesale drug plants is taking place today, all the way from partial improvement to entirely new plants. In these days the art of selling and merchandising and the scientific direction of these functions are all important in meeting successfully the challange that the present economic situation throws in the laps of all, but especially in the distributive trades. Successful further prosecution of handling operations, sales, and job evaluation will enable the wholesale druggists to maintain leadership in the field of distribution, and serve also to help maintain our unique record in holding the cost and price line against the forces of inflation."

Governor Oscar Rennebohm of Wisconsin, himself a retail druggist, warned members of the NWDA against an "underground movement" to repeal the Miller-Tydings Fair Trade Enabling Act. He warned that the attacks had become intensified since the death of OPA, with "wild assertions" being made that "fair trade has increased costs to the consumer." "Figures to back up these assertions are either lacking entirely, or are so scrambled that one cannot follow them," he said, continuing, "If those opposed to fair trade had their way, we would be living in an atmosphere of loss leaders, with the only law the law of the jungle. The independent merchant would be at the mercy of the powerful wealthy and gigantic retail organizations who would deliberately sell nationally branded merchandise at a loss in order to force out of business the little fellow who must make a profit on every item he sells in order to survice.

"I have never been able to figure out in my mind why these economic dreamers in Washington and elsewhere have been so determined to destroy fair trade and thus make the lot of the small independent business man tougher and tougher. It seems to me that all too many of them weep crocodile tears over the plight of the 'small business man' while they surreptitiously try to slip a knife in his back. For whatever reason, however, it is no secret that those planners have occupied in the past rather high places, particularly in the federal government. I regret to say that many of them are still there although they are not as openly vocal as they once were."

BLACK STAR

A REVIEW of the SUNTAN INDUSTRY

By L. STAMBOVSKY

THE SUNTAN phase of the drug and cosmetic industry seems to possess an irresistible fascination. Almost every member of the chemical, drug or cosmetic business—be it a huge chemical dynasty, the humble "bathtuber" or an intermediate—all have been tempted or did attempt to get into the act. The exact nature of this appeal is hard to define unless it was a subconscious realization of a tremendous future. The season is short and the field highly competitive. Failures occur annually, and yet replacing those which fail, new products appear with amazing regularity. This discussion is not intended to discourage participants or entrants into the suntan business, but on the contrary to point out fallacies and pitfalls responsible for failure and consequent substantial losses. So much for the negative side of the matter.

On the other hand, the immediate future for suntan products is one of wide expansion and lucrative returns. There are a number of sound reasons supporting this prediction. Today's sales of suntan preparations represent but a fraction of the existent untouched market. How large is this market? The answer can be found only by spending a summer behind a retail drug counter at the seashore or any locality where people expose themselves to sunlight. There and then will be revealed the fact that for every person who buys and uses a sunburn preventive, twenty do not. This was not ascertained by counting those who did and those who didn't. It was much easier to observe the sale of preparations used in the *treatment* of sunburn—definite painful and incapacitating injuries resulting directly from excess solar irradiation. The total number of burns occurring annually must run into many millions—certainly not less than 25 million, which includes burns of all degrees. The above estimate is based on the number of units of remedies sold for the treatment of sunburn. It will require but little convincing to accept this assessment when it is realized that the sale of a popular greaseless cream sold for sunburn, itself runs into many million units per summer. That is only one preparation. We must not neglect the old reliables such as vinegar, baking soda, carron oil, various oils and greases and the almost countless other proprietary ointments. The aggregate sales of all these and other agents will more than total 25 million units, which is significant of 25 million burns. This mass summer malady involves a colossal outlay for treatment and a priceless loss of vacation time. Each and everyone of these persons would gladly have paid fifty cents or a dollar to have avoided his or her ordeal—and a severe burn is, to say the least, an ordeal. Here are 25 million new customers, who require merely to be told to be sold.

The public should be informed of the manifold complications associated with severe or mild chronic solar-dermatitis. This enlightenment should stress the partial or complete incapacitation which will surely follow, which of course means the ruination of limited vacations. Depreciation of skin tone should be emphasized. A serious burn frequently leaves the skin, in an ugly, blotched, condition and will fail to tan not only that summer but for many succeeding summers. Loss of tan is a serious deprivation to many people, male and female. And then it should also be pointed out, there is the cost of treatment, which to the limited budget, can be of considerable consequence. All this should be concluded with the promise that product *X* can and will prevent sunburn with all that it entails. So much for 25 million new customers comprising the "burn" category. There is another large group waiting to be sold. It is generally thought that tan or pigment is a complete protection against excess sunlight. *This is not true.* Pigmentation is but the secondary line of defense. Primary and most important is the proliferation and cornification of the epithelial cells. These terms signify an increased number and thickening of the surface skin cells. But the combined defense of proliferation, cornification and pigmentation is still unable to resist abnormally long exposures to powerful sunlight. Man's skin was never designed nor intended to withstand ununlimited actinic punishment. It may *apparently* be impervious to the impact of destructive quantities of solar ultra-violet, as judged by the absence of irritation. Actually, subtle, profound, pathologic changes may be gathering form and impetus.

At the time of excess insolation, a beautiful tan may be present and the skin healthy and attractive. But a few months or years later the effects of unreasonable irradiation may then become manifest in several or more unpleasant forms. Depigmented areas may appear. The skin becomes dry, aged, thickened, wrinkled and inelastic. Warts and moles are activated. Other lesions would include exaggerated freckles, eczema, exeroderma pigmentosum, pruritis. Any of these can eventually add up to neoplastic disease. Proof of this resides in the statistical fact that skin cancer is far greater below the Mason-Dixon line than in the northern states, where of course, there is far less sunlight. Also outdoor workers such as fishermen, farmers, sailors, etc., sooner or later show alterations in the integument of a pathologic nature. The inference here is clear. We have therefore another brand new market for sunburn preventives, composed of those many, many persons who insist for reasons of their own, upon inordinate exposures to powerful sunlight—exposures consisting of days, weeks and months without end. These people, if told the price of their foolhardy indulgence, would be very happy to purchase and religiously use a sunburn preventive in order to avoid same.

Certain sociologic trends are materially aiding to expand the suntan market. Sixty million employed means that now more people than ever before in our history are able to engage in outdoor pursuits. The continual reduction in weekly working hours still further facilitates this participation. Improved and cheaper transportation also play a worthy role, making the outdoors more easily and frequently available, winter or summer.

Thus we have a preview of the suntan future. At least 25 million new customers are available, or will be the moment some one makes an effort to reach them. There are also thousands of old customers who in the

past were one-time purchasers, but who, if informed of the dangers of too much sunlight, would protect themselves during their entire exposure, be it day, week or months.

The past can be a guide to the future. What are causes of yesterday's and tomorrow's failures? Simply expressed, it can be summed up as an insufficient and incorrect understanding of the basic problems upon which depend the prevention of solar-dermatitis. The underlying science is relatively new and highly specialized. It is unfortunate that many swivel-chair scientists set themselves up as experts in the field and from these sources many manufacturers drew their data upon which their product was built. The definition of a swivel-chair scientist is one who may possess infinite academic and theoretical information, but who cannot or will not correlate this knowledge with field or clinical application. For instance about 1940, one of our greatest chemical firms released a new sunscreen. The very name of its parent endowed this compound with awesome potency. Yet the erythemogenic ultra-violet absorption was so poor as to force a hasty withdrawal inasmuch as it was utterly worthless as a sunscreen. At a slightly later period another huge organization announced a new and miraculous filter, requiring but one-quarter of our per cent concentration. Today, this pseudo-miracle is still being peddled. Five per cent is now recommended plus the presence of a synergistic agent of some sort.

In both of these failures, someone obtained a beautiful spectrogram of the agent in question, showing complete extinction between 2950 and 3150 Angstrom units. No thought was given to erythemal confirmation by actual skin tests. It is a certainty that those concerned now know that spectrographic readings yield only qualitative information and are no indication whatsoever of how much actinic ultra-violet has been absorbed or transformed. Another extremely well-known pharmaceutical house has been strenuously promoting a hydro-alcoholic sunburn preventive with hydroquinone as a screen. The writer examined and abandoned this agent as far back as 1932 because of its multiple intolerable characteristics, for example, its ultra-violet absorption is negligible, necessitating high concentrations: it is chemically unstable and is generally regarded as toxic. With all the far more desirable screens available, why anyone should select hydroquinone is difficult to understand. We could quote many more similar cases.

The wise manufacturer who is now in the field or who contemplates entry, would do well to implement his laboratory facilities, theoretical and practical, in such a manner that the product developed will render the consumer a service rather than being merely a pretty piece of academic research. The first and paramount question, totally ignored by so many so-called authorities, is: how efficient should a sunburn preventive be? During the pioneering days, little or no consideration was given this question. Practically all products at that time offered little or no protection. Today this condition no longer exists. There are available preparations which do provide definite immunity from solar burns and the sun worshipping public is slowly but surely becoming cognizant of this fact. The average user will remember *not* to buy any product which permits him to become painfully burned. Therefore it is but elemental reasoning to say that any sunburn preventive already being marketed or being developed for future presentation, that does not bring the consumer adequate defense from sunburn, is doomed to failure with absolute surety. The high mortality of impotent products proves the foregoing to be fact.

Again the question, "how effective should an adequate sunburn preventive be?" The answer is simple, effective enough to prevent painful solar burns when used by the average person under average conditions. An "efficiency minimum" can be determined only by the close integration and correlation of a number of variable factors. The entire matter was discussed in detail in Drug & Cosmetic Industry, April 1939, but because of its importance, we shall repeat it again.

Skin response to solar ultra-violet is governed by the following variable factors; intensity of erythemogenic ultra-violet, length of exposure and individual skin sensitivity. After solving this equation, there are still other lesser but influential conditions which must be reckoned with in the determination of an "efficiency minimum." We are indebted and offer full recognition to Dr. M. Luckeish of the General Electric Co. for data which serves as a keystone in the matter. He found that 20 minutes of June sunlight at noon will produce on average untanned skin an effect known as, "minimum perceptible erythema;" 50 minutes will stimulate a "vivid erythema;" 100 minutes will result in a painful burn; 200 minutes or more will provoke a blistering burn. For convenience sake we tabulate this data:

Table 1.

Effects of June Sunlight at noon upon average untanned skin:

20 minutes . . . . . .minimum perceptible erythema, (MPE)
50 minutes . . . . . .vivid erythema, (VE)
100 minutes . . . . . .painful burn, (PB)
200 minutes . . . . . .blistering burn, (BB)

Blondes and red-heads may vary from these averages by as much as 40 to 170 per cent because of their abnormal photo sensitivity. MPE. is that degree of reddening barely though definitely discernible. VE. is a strong red, and when present, is easily interpreted as such by the observer. At this stage of skin response to ultra-violet energy, no real damage has as yet taken place. From Table 1, it is readily appreciated that 50 minutes or VE. is the maximum stimulation possible without injury inasmuch as further irradiation advances into the painful burn zone and will result in more or less irritation. Therefore protective agents regardless of the time actually spent in the sun, should not permit a photo-stimulus greater than that which will produce a VE.

(*Continued on page 700*)

FLUORINE and TEETH

By M. A. LESSER

TOOTH DECAY is part of the price paid for being civilized. This evergrowing problem has led researchers down many paths seeking ways to prevent dental caries. Too often the road has led nowhere. During the last decade, however, new hope has been aroused by the results obtained with fluorine. Probably no approach to the dental caries problem has held such promise of effective control as the use of this element.[1] Indeed, it is possible that fluorine may serve not only to prevent tooth decay, but also ameliorate or cure dental caries.[2]

Strangely enough, the history of fluorine's beneficial action goes back to the discovery that it is the causal factor in the production of "mottled" enamel. Although this condition had long been prevalent in many areas of this country, as well as in other parts of the world, it was not until 1931 that fluorine in drinking water was proved to be the factor responsible for the ugly discoloration.[3,4] Prior to this discovery, however, McKay,[5] among others, had observed that people with mottled enamel developed fewer dental caries than those whose teeth did not show such staining and discoloration.

Obviously, in addition to causing mottling of enamel, fluoride in drinking water also contributes in some way to a reduction of caries. It is now well established that persons who have lived all of their lives in high fluoride areas, or who have lived in those areas at least during the first eight or ten years of their lives, have less dental caries than people living in fluoride-free areas.[2] The first objective, experimental evidence of this anti-caries action was published[6] in 1937. Particularly important is the work done by Dean and his associates of the United States Public Health Service. They not only set out to determine the optimal fluorine content of drinking water,[7] but they also made extensive studies of the influence of fluorine on the incidence of dental caries in children.[8]

A number of surveys were made in many different parts of the country. As a result of this work it was demonstrated that amounts of fluorine below those which would produce mottling of the enamel would cause a marked reduction in caries activity. Dean's[9] most recent report, which summarizes many of the previous studies, shows definitely that there is an inverse relationship between the fluorine content of the drinking water and the amount of dental caries.

In investigations carried out in twenty-one cities, the research teams examined a total of 7,257 school children, aged 12 to 14 years. It was found that children using domestic waters containing as little as one part per million (p.p.m.) of fluorine experienced one-third as much dental caries as comparable groups using water containing little or no fluorine. Briefly summarized, 847 children continuously using a domestic water containing more than 1.4 p.p.m. of fluorine averaged 2.4 decayed, missing or filled teeth; 1,403 children of cities with water supplies containing between 1.0 and 1.4 p.p.m. of fluorine showed 2.9 affected teeth per child. In the 1,140 children of cities whose public water supplies contained 0.5 to 0.9 p.p.m. of fluorine, an average of 4.2 teeth per child showed evidence of past or present dental caries attack, while in the 3,867 children of cities whose water supplies contained less than 0.5 p.p.m. of fluorine, an average of 7.4 teeth per child showed evidence of having experienced dental caries.

Similar findings have been reported as the result of other investigations. Such studies have been made, not only in the United States,[10, 11, 12, 13] but also in England,[14] South Africa,[15] India[16] and other parts of the world. The results of these many studies have shown definitely that people who have spent their lives in areas where the fluorine content of the drinking water is 1.0 p.p.m. or more experienced two to three times less cavities than those who ingested fluorine-free waters.[2]

The consistent nature and dependability of these findings was aptly illustrated in a recent study by Downs and McKay.[17] Their investigations were brought about by repeated reports from Montrose, Colo., that the dental caries rate was extremely high even though the city water supply was said to contain 1.4 p.p.m. of fluorine. Examination of Montrose natives confirmed a high caries incidence. No cases of fluorosis or mottled enamel were found. The only conclusion that could be reached from this study was that there was an error in the report of the fluorine content of the city water. This was confirmed by a later analysis which revealed that the correct flourine content was 0.3 p.p.m.

With certain facts already established, researchers are looking into other factors which may influence the picture. Klein,[18] for example, has made a study of familiar tendencies with regard to caries formation and fluorine protection. Like others, he found that children with continuous exposure to fluoride water

since birth are, as a group, protected against caries attack. However, the degree of protection does show variations. Those who are least protected are children whose parents show the highest tendency toward dental disease, while those who are protected most are children whose parents show the lowest tendency to be attacked by dental disease.

Considerable work has been done in the effort to determine how fluorine exerts its beneficial effects on the teeth. Chemical studies have shown that caries-resistant teeth have a higher fluorine content than do teeth which are susceptible to caries production.[6] As remarked by Bibby,[19] an important observation is the fact that the principal increase of fluorine in the caries-free teeth was in the enamel, with only a negligible increase in the dentin.

Animal experimentation has also yielded useful information. Although the rat is not the ideal animal for such work, it was, until recently the only practical means of studying caries by these methods. However, it has been demonstrated[20,21] that rat caries can be prevented by adding fluorides to the food or drinking water. While such data cannot be considered conclusive, it does add another link to the chain of evidence that fluorine can protect the teeth against dental caries. More comparable results will be obtainable as a result of introducing the Syrian hamster as a laboratory animal. The teeth of this animal have many features in common with the teeth of humans. Already, one group of workers[22] has found that fluorides are rather effective in cutting down the occurrence of caries in the teeth of the hamster.

Much valuable information has also been gathered from bacteriological studies. It is known that there is a direct relationship between the number of *Lactobacillus acidophilus* organisms in the saliva and dental caries activity in the mouth. Where there is active tooth decay, the number of bacteria per cubic centimeter of saliva is high (20,000 or more), while in mouths in which the teeth are immune to decay at any specific time the counts are negative (under 100)[23] On this basis, it is reasonable to expect a lower bacterial count in areas of higher fluorine concentration.

This assumption is borne out in a number of comparative studies made in different parts of the country. Jay and Arnold,[24] for example, found that in areas where fluorine was present in the drinking water, an average of 37.4 per cent of the population had counts that were in the negative range. In contrast, only 16.1 per cent of the people in non-fluoride areas showed negative bacterial counts. In another instance,[25] comparisons were made between two cities, one of which had a water supply containing 1.8 p.p.m. of fluorine, the other being practically fluorine-free. The differences in the bacterial counts in these two cities were, roughly, of the same ratio as the differences in the caries rate.

Of importance in this connection is a report[23] on the bacterial counts, made in the controlled Newburgh-Kingston Fluorine Demonstration now being conducted by the New York State Department of Health. In Kingston, which is serving as the control with fluorine-free water, the percentage of high and low bacterial counts has remained approximately constant during the two-year period of the test. In Newburgh, however, there has been a consistent drop in percentages of high counts and a rise in the percentages of low counts since fluorination of the municipal water supply.

Such studies amply indicate that the bacteriological factors which contribute to the production of dental caries are modified in some way by fluorine. How fluorine operates to inhibit oral Lactobacilli and perhaps other bacteria which inhabit the mouth is still a matter of speculation. It has been suggested[26] that fluorine, through its action as an enzyme inhibitor, decreases the ability of the oral factors to produce the acids which are necessary in the destructive processes leading to dental caries.

Others[27,28] have suggested that fluorine modifies the tooth structure so that the enamel becomes harder and more able to resist the acids which ordinarily produce cavitation. In Bibby's[19] opinion, this seems to be the result of a peculiar affinity which exists between fluorine and the calcium phosphates in teeth. When fluorine combines with the enamel or dentia, it greatly reduces their solubility in acid. "This increased resistance to the action of acid," said he, "is probably the primary cause for the reduction of caries in teeth which have come in contact with fluoride-containing waters."

Although the mechanism of fluorine action may not be fully elucidated, it is clear that continuous exposure to fluorine-containing water during the first eight to ten years of life affords most people a significant degree of protection against dental caries. There is no evidence that this protective mechanism, whatever it may be, is effective after the age when the teeth are fully formed and calcification has been completed. Nor is there any evidence that ingestion of fluorine will arrest dental caries after the teeth have calcified.[2,25,29] In other words it would not benefit an adult to move into a fluoride area in the hope of preventing tooth decay.

These many studies have also served to establish optimal levels of fluorine content in drinking waters. There is quite full agreement that a domestic water containing about 1.0 p.p.m. of fluorine is optimal for dental health. Analysis of the data indicates that insofar as caries control is concerned there is apparently little advantage to be gained in using a water containing a higher proportion of fluorine, since maximum caries inhibition occurs at approximately 1.0 p.p.m. Moreover, this optimal concentration is sufficiently low to eliminate the problem of dental fluorosis or discoloration.[9,10,11]

Where the fluoride content of the water is at this optimal level there is no particular problem and no treatment is necessary. Where the fluorine content is excessive, steps must be taken to remove the excess in order to protect the population against endemic fluorosis or mottled enamel. Efficient methods[30] for reducing the concentration of fluorine to the permissible

BLACK STAR

concentration of 1.0 p.p.m.[31] are available. Waters deficient in fluorine may have fluorides added to bring the concentration up to the optimal in order to lessen the amount of dental decay in communities.

Because it may have such important bearings on the dental health of the nation, especially with regard to the teeth of future citizens, the advisability of adding fluorine to deficient water has received considerable attention and encouragement. Leaving nothing to chance, public health workers have started a number of carefully controlled, long-range studies on the effects of adding optimal quantities of fluorine to drinking water. The Newburgh-Kingston tests, mentioned previously, is an outstanding example of such an investigation. It will be about ten years before the benefits of the water treatment will be realized. Equipment for adding proper amounts of sodium fluoride to Newburgh's water supply has been set up and a regular system of analysis has been arranged. Dental examinations are being made annually of all the five- to twelve-year-old school children during the test period. Plans have also been made for a pediatric examination of a sample of the child population, including a general physical examination, urinalysis, and X-rays of the long bones and centers of ossification.[32] As explained by Robbins,[33] this New York study is expected to establish beyond doubt the following points: (a) The non-toxic effects of ingesting artificially fluorinated water, (b) a definite and effective control of caries, and (c) a practical and safe method of artificially fluorinating the communal water supply.

Other large scale tests involving many thousands of children are being conducted in Michigan and Wisconsin, as well as in Ontario, Canada. During the next decade, these experiments, and others that will probably be set up, will be followed with keen interest. In the meantime, some idea of what beneficial changes may be expected from the addition of 1.0 p.p.m. of fluorine to a fluorine-free public water supply is given in Arnold's[10] report on the results obtained in Aurora, Ill. He stated that a comparison of the dental caries picture in Aurora children with that of children living in three communities using the fluoride-free waters

(Continued on page 696)

In package design, eye appeal means buy appeal! That's why the beauty and rich color of Continental lithography play such an important part in increasing the popularity of our customers' products.

Just as the cans themselves provide the ultimate in product protection, smartly designed labels do a first class selling job.

Down through the years our skilled lithographers have earned an enviable reputation for faithful reproduction of customers' designs. From behind the scenes they have made many a product stand out on store shelves.

When you bring your packaging problem to Continental you are assured of sturdy construction, modern design and fine lithography. It's no wonder the famous Triple-C Trademark means "best in quality—best in service" to so many manufacturers.

CONTINENTAL CAN COMPANY

100 East 42nd Street, New York 17, N. Y.

PACKAGING and SELLING

TIE-INS WITH THE MOVIES

HARD times for the movie industry in its export business are causing the big studios to examine with greater interest a tie-in with manufacturers of branded products so that leading moving pictures can get an additional chunk of publicity without having to pay for it. That this extra publicity isn't peanuts is indicated by the recent expenditure of 350 thousand dollars by a soft drink manufacturer in a tie-in campaign with a recent picture.

No one would ever dream of underestimating the influence of moving pictures in setting the standard of living, in promoting fashion, and in their influence on the entire growth of the cosmetic industry. It may well be that moving pictures have had far more to do with bringing cosmetics to almost universal use in this country than any other influence.

A top rank ng moving picture is supposed to be seen by about 18 million people in this country. That means, spread over a relatively short period of a few months, every city, town and hamlet is exposed to this picture. That is why a program on the part of leading studios to cooperate for purposes of publicity may have a very substantial effect on the advertising programs of a number of industries, but above all by perfume and cosmetic manufacturers.

So far as we know, there has been very little planned effort in this industry to take advantage of the movie studios' new attitude. Jergens has managed to display its hand lotion, and Max Factor has worked out a coordinated program of advertising based on release dates in localities and in the 80 countries in which they advertise.

We understand that all negotiations for the star, as we'l as for the picture, are conducted directly with the studio. This may include the brief use and visual showing of the product by the star or in some part of the show, and the release of stills which may be used in a broad program of magazine and newspaper advertising by the manufacturer.

Cooperating now on a program of this sort are several automobile manufacturers, typewriter manufacturers, other utilities, and some packaged goods, such as soft drinks, but there has been very little effort yet, so far as we have heard, on the part of cosmetics.

We prophesy, however, that if studios continue their willingness to expand publicity cooperation, perfume and cosmetic manufacturers will find that they are the most natural participants in such a program.

Segregation

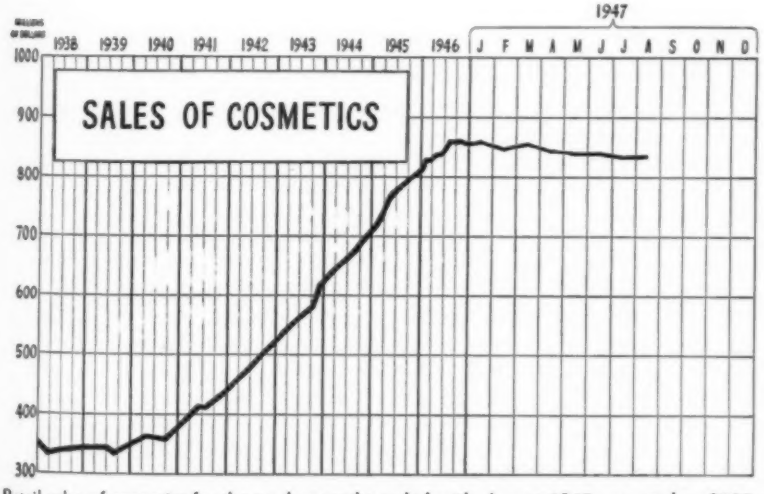
There seems to be somewhat of a trend in toilet goods departments to work toward segregation of products. This is already well underway in chain stores notably n the department layout of the Whelan stores.

In department stores many complications enter into such a change, even though in a few stores it has clearly been indicated that such a departmentalizing of certain products will increase business. Chief among all d fficulties is the complication of the demonstration system, which would mean either having the same product occupying space and display space in two places in he department, or denying it in one position, which would entail complications with the manufacturer and his demonstrator.

Probably the greatest progress has been made in establishing a good grooming department for men's toiletries. Many leading stores now have such a department. The decision to open up such a specialized department has not brought up any real complication with the demonstration system, and on the other hand, it has enabled the store to combine a number of other accessories and open the possibility of attracting increasing traffic by men.

The next department which seems to hold opportunities, and about which there is some discussion in a few leading stores, is a segregated perfume department. This consideration has been accelerated by the substantial drop in sales for high priced perfumes, and the feeling of the retailer that this prestige and generally most desirable part of his department would justify specialized attention if there was any hope that it would maintain the high volume of perfume sales attained during the war.

Both manufacturer and retailer re-



Retail sales of cosmetics for the twelve months ended with August 1947 amounted to $835,146,000. This compares with $833,550,000 for the twelve months ended with July 1947 and with $863,257,000 for the twelve months ending with August 1946.

member only too vividly the year by year decline in perfume sales following the last war, and the substantial replacement of perfumes by colognes and toilet waters.

There are very many arguments in favor of a segregated perfume department, but since this division of the industry is so largely supported by demonstrators, either direct or indirect, at present it is a complicated retail problem to separate the perfume from the demonstrator, and to make it available to the store's customers in a way that would not only make shopping for perfume more convenient and more pleasant, but would certainly center attention of the department's traffic more specifically on this one highly desirable division of the business.

Plans for Harriet Hubbard Ayer

Lever Brothers is not wasting any time in gearing up Harriet Hubbard Ayer to a top speed machine. Repeated announcements in the news columns have given the trade the picture of a largely increased sales and operating staff, and stepped-up advertising in large space newspaper advertisements together with spot radio is setting an accelerating pace, anticipating next year's budget.

Judging by this early advertising, Lever Bros. is doing just about what the trade expected. That is they are making Luxuria the keynote, and are all set for the first step in an attempt to make this cream a national figure in cosmetics. The development of next year's plan, that is the relationship of the full treatment line, the demonstration system and Luxuria as a heavily advertised mass distributed item, will be watched with great interest. So also will the newly expanded association with wholesale druggists, in relation to department store business, be watched with keen trade interest.

Feather Merchant

Unti a few years ago this country was entirely dependent upon foreign sources to get goose down for powder puffs. It was through the efforts of George Scheufele, a Swiss German who came to this country in 1929 to establish a powder-puff importing business that the first steps toward production of down to be used in the manufacture of powder-puffs were taken.

Up to that time the main source for this down was France, but the methods of production there were rather haphazard and as a result the quality of each shipment differed from the previous one.

Using one half of his furnished room on the West side of New York as a warehouse and office Mr. Scheufele gradually expanded, and by 1933 he began importing goose skins for experimentation, until he perfected a process of tanning and bleaching the down, unmatched in any country. The result are golden eggs in rather different forms than those of story book fame. They appear as the softest eiderdown powder puffs, pink, yellow, blue, rose and lavender.

In 1937 Mr. Scheufele seeing the rumblings of war across Europe, decided to buy a farm in Pennsylvania and raise his own geese. By 1942 he had expanded his flock enough to start production of powder-puffs with 800 geese. With the war and gas rationing he moved his farm nearer to the markets by starting one at Zarephath, N. J , where some 5000 geese waddle about his thirteen-acre place, with the flocks increasing each year However, he now buys the geese from breeders and brings them to the farm to fatten them to insure a fine coat of down.

The processing season runs from November to February, during this time about twenty-five people are hired to see the job through. When the geese are slaughtered, the feathers are plucked and graded the downy skin removed whole from the goose, then cleaned, pickled, tanned and dyed and stretched, ready for the puff making. While Mr. Scheufele primarily started the farm for the manufacture of goose down for powder puffs, other parts of the goose are becoming increasingly important. There is goose fat rendered from the body fat of the bird, good fat being used for edible purposes, inedible fat is sold to ointment manufacturers. Feathers are sold for pillows. The meat is boned and packed in tins and the livers made into paste. Everything of the goose is used but the honk.

The Cosmetic Trend

Recent releases of the Federal Reserve Banks appear to give support to the now more often heard opinion that the back of the recession in the demand for toilet goods is broken and that the news from now on can be expected to be more frequently on the optimistic side.

Of course, it all depends upon how one looks at it. Conditions vary in different localities and, while there is evidence of a distinct improvement since July, it will take a while in several instances before stores have caught up with the lowering sales volume of the first part of the year.

However, to look over some of the more outstanding figures, there is the July report from the Fifth Reserve District covering such places as Washington, D. C. and Baltimore, for an example. Six of the leading department-stores of the national capital reported a drop of toilet goods sales of 8 per cent for the six months ending with July 31. Eight Baltimore stores lost 1 per cent only while the rest of the district dropped 9 per cent for a district total of minus 6 per cent. July showed a marked improvement. Sales were still lower than during 1936 but Washington stores lost only 4 per cent. Baltimore reported a 3 per cent decline but the whole district got by with a only 3 per cent decline.

The Cleveland Reserve District went through July with no change against the previous year. The Seventh Reserve District, including such active population centers as Chicago, Indianapolis, Detroit and Milwaukee lost only 0.2 per cent; largely because of a real revival of the toilet goods demand in Chicago where sales rose at the rate of 3.8% in July. Indianapolis sales dropped 0.5 per cent, those of Detroit 1.7 per cent and Milwaukee lost 3.1 per cent. Chicago toilet goods sales were equal to the city's average for all department store sales but fell behind store averages practically everywhere else.

Most enlightening, probably, and indicative for the trend is the performance of the toilet goods counters within the New York (Second Federal) Reserve District. Sales that had dropped over the six months period from February to July to 3.0 per cent below the same period of last year turned to a plus 6.0 during July which, generally speaking, is not a month given to rises in New York and any of the other more prominent Eastern city markets.

The really important feature of all this is that, with not more than ordinary support, several of the larger city markets in two widely separated sections of the nation had for-the-month record sales of toilet goods during July; New York adding 6 per cent and Chicago near 4 per cent, while at least one district, Cleveland, held the line.

If it can be accomplished at one place it can be at others. The question facing toilet goods manufacturers however is, what they can do to keep themselves in the front rank of the demand. There is no doubt whatever, that, even with the slight recovery which toilet goods have been making in some spots and the slowing up of the downward trend in others, sales are not keeping in step with the general performance of the market. This may be the fault of the stores or that of the industry. The chances are that each must carry part of the blame. However, with the trend showing at least some improvements there should be a good prospect to do better as the year draws to a close.

Coty makes a good deal with VUEPAK

Trust Coty to capitalize on all the sales-making qualities of sparkling, transparent Vuepak for their outstanding combination deals. And trust Vuepak to do the same maximum showing and selling job for your own special offers, introductory deals and companion selling events.

In an individual "showcase" container of this rigid, crystal-clear Monsanto packaging material, all the advantages of your deal . . . number of items, beauty, utility, color, design, etc. . . . are attractively *revealed* and *protected*.

You can count on getting fullest retailer support for your Vuepak'd deals, too. Retailers like them because they display better; they're fully protected against handling, missing items, shopwear and dust; they don't depend on clerks to explain; they accelerate turnover and build up volume.

Whatever you're planning to sell, don't fail to show all that you've got to offer . . .via Vuepak. Get full details from your box supplier, or direct from MONSANTO CHEMICAL COMPANY, Plastics Division, Springfield 2, Massachusetts. In Canada, Monsanto (Canada) Limited, Montreal.

Vuepak: Reg. U. S. Pat. Off.

MONSANTO
CHEMICALS — PLASTICS

VUEPAK

SERVING INDUSTRY . . . WHICH SERVES MANKIND

TO PROTECT AND SELL DRUG PRODUCTS

- ★ Attractive
- ★ Save shelf space
- ★ Preserve purity
- ★ Prevent evaporation
- ★ Prevent moisture absorption
- ★ Provide quick access to contents
- ★ Adaptable to front and side labeling
- ★ Available in 24 capacities

ANCHORGLASS Standard Blakes

Anchor CONTAINERS and CAPS

PRODUCTS OF
ANCHOR HOCKING GLASS CORPORATION
LANCASTER, OHIO

ANCHORGLASS Standard Blakes have for years been widely accepted as ideal containers for capsules, crystals, pills, tablets, heavy liquids and hydroscopic products.

They preserve the original strength, purity, curative or other qualities peculiar to your product. They are impervious to the action of most products. They prevent evaporation and moisture absorption.

Standard Blakes give easy, safe, quick access to the contents and can be effectively resealed time after time. They quickly show the user when the supply is low and it's time to reorder.

Anchorglass Standard Blakes are designed for modern shelf stocking —adaptable to front and side panel labeling.

Amber Anchorglass Standard Blakes are available in 24 capacities —from ⅛ ounce to 32 ounces.

"Crime Photographer", Thursday evenings, entire CBS network, sells all America on glass-packaged products.

Department of Commerce Monthly Retail Trade Report

Retail sales of all kinds in drug and department stores showing the increase for the month of August 1947 as compared with the same period in 1946.

	Department Store	*Drug Store*		*Department Store*	*Drug Store*
Atlanta	−8	+1	Memphis	X	−5
Baltimore	0	−11	Milwaukee	−13	+2
Birmingham	−7	−10	Newark	−13	+12
Boston	−7	−1	New Orleans	−2	−2
Buffalo	−12	+10	New York	−8	+3
Chicago	−17	+4	Philadelphia	−6	−3
Cincinnati	−8	+2	Portland	−3	−3
Cleveland	−12	−3	Providence	−10	+1
Dallas	−5	−7	Saint Louis	−11	+4
Denver	X	+3	Salt Lake City	−15	0
Detroit	−12	+11	San Francisco	−5	−3
Indianapolis	−16	−3	Seattle	0	−7
Los Angeles	+8	−4			

Personal Property

A desk drawer manicure kit, designed by Peggy Sage for business girls called the Personal Property Box is now being offered.

The set is equipped with all requisites for either a quick polish change or a lunch-hour manicure. It includes manicure polish, polish remover, satinbase, polishshield, cutical remover, emery board, orange stick and cotton. There is also a lipstick to match polish shade.

The personal property box is made so that the cotton pulls from a specially constructed container and a little trinket section beneath the panel which holds the lipstick. A name plate section on the box reads "Personal Property of...." leaving space for the owner to add her own name. Box retails for $3.00 plus tax.

Monthly Averages

The question is frequently asked: What should a cosmetic manufacturer's business run each month as a percentage of the entire year? One of the leading cosmetic manufacturers, whose business runs around three million dollars a year, has carefully compiled these figures for 19 years. Even during this upsetting Spring when a heavy volume of returned goods made him believe that these figures would not hold true, and when these figures were discarded it was later discovered that business continued within a narrow fraction of the monthly percentage established in former, normal years.

Listed below is the average monthly business computed by this company, including 19 successive years of business. The first column gives the percentage of the entire year's business done in any one month. The second column is the accumulating percentage for each monthly, preceding period. It will be noted here that the first six months, January to June, inclusive, show 39 per cent of the year's business, and that November is the peak month of the entire year.

19 Year Average

Monthly Average		Accumulating Average
6%	JAN.	
6%	FEB.	12%
7%	MAR.	19%
7%	APR.	26%
7%	MAY	33%
6%	JUNE	39%
6%	JULY	45%
7%	AUG.	52%
11%	SEPT.	63%
14%	OCT.	77%
16%	NOV.	93%
7%	DEC.	100%

Suit Yourself

For the under $10 Christmas gift, Schiaparelli has put three perfumes, Shocking, Sleeping and Salute, in a rayon satin scent box called "Suit Yourself."

Each miniature holds a ration of Schiaparelli's well-known perfumes and the box is covered with Shocking pink hearts and lined with tufted rayon satin, it has the added advantage of reuse as a jewel or handkerchief box, $8.25 plus tax.

Western Packaging Exposition

The Western Packaging Exposition is to be held August 10-13, 1948, in San Francisco's Civic Auditorium. There will be conferences on packaging, packaging and shipping, at which authorities will discuss major packaging problems, with special emphasis on subjects peculiar to industry of the Pacific Coast.

Ad Budgets For '48 Increase

A nation-wide survey by the Wall Street Journal shows that practically all advertising budgets next year will be as big as this year's large expenditures, and very many will be larger. There is less fussing now than a year ago about depression and inflation and the possibility of having to cancel contracts before the year is out.

In a check among the Association of National Advertisers, with 102 members reporting, 47 companies are planning larger appropriations, 42 will spend the same amount, and only 9 are now planning smaller budgets.

Lady Esther Ad Changed

The controversial advertising copy which has been giving so much impetus to the sale of Lady Esther lipstick is about to be changed. The Advisory Copy Committee of the Magazine Publishers finally reached the point of objecting to certain copy statements, which have caused quite a great deal of agitation in certain lipstick quarters.

Cream Shampoo to Get Added Impetus

The cream shampoo will certainly take a prominent place on the cosmetic stage next year. Colgate's transfer of the Lustre Creme account to Lennen & Mitchell is setting the stage for an expanded program of advertising.

The tentative budget plans for Rayve Shampoo now have an expenditure of one and a quarter million dollars during the year. The new advertising plan for Rayve calls for dropping its radio network program in favor of a large magazine schedule, mostly in color, cooperative newspaper advertising and spot radio. Network radio seems to be faring not too well from the cosmetic industry next year. Richard Hudnut is dropping out of the network program for hair preparations, just as Lady Esther, earlier in the year, switched from a long sponsorship of radio to color space in magazines.

Artistic Presentations

in PLASTICS

We specialize in distinguished catalin and lucite cosmetic containers including Cream Rouge and Eye Shadow Boxes, Solidified Perfume Boxes, Bottle and Jar Closures, Displays, powder and perfume Tester Displays, Trays, powder blending Spoons. 24 Karat, Gold Plating. Embossing — carving on Lucite and Catalin.

CRYSTAL PLASTICS, INC. *Manufacturers and Designers of Lucite, Plexiglas, Acetate & Catalin Products* • 521 West 23rd Street, New York 11, N. Y.

Bombi is featuring 17 attractive Black Magic gift sets for the holiday season. Among them is this two piece combination.

Parfums Degas introduces two new perfumes to America—Paris born and Degas inspired—Danseuse Etoile.

Lancome offers its "Gold Ribbon Package," a fascinating miniature (approximately ¼ oz.) purse size crystal flacon which has been especially created in Paris for the United States market.

New Label For Sir

The Mulhen's 4711 Men's toiletries line has been redesigned. The label and bottle were changed because the Mulhens company thought the old type label, executed in blue and gold was too similar to the feminine line also manufactured by the company. The new label was created in four colors, maroon, blue, gold and black and was designed and printed by Richard M. Krause Inc. The bottle was manufactured by Swindell Brothers.

Lactopine Gift Set For Men

Lactopine presents a new combination gift set of toiletries for men, in a substantial black and green leatherette case, which when empty makes a good looking and sturdy utility case. Various combinations of items are available all scented with imported pine needle oil.

Cream Nail Polish Remover in Tubes

The Riff Company of Los Angeles has come out with a cream nail polish remover packed in convenient, small New England collapsible tubes.

Easily carried in handbags, the cream form is dispensed from a tough metal tube, in measured amounts on each finger nail, without danger of spilling, messy leaking, or soiling clothing. Retails for twenty-five cents.

Skin Care Survey

The Woman's Home Companion in a survey of its readers' cosmetic preferences and habits found that 93 per cent of those questioned usually cleanse their faces with soap and water plus cream, with emphasis on soap and water cleansing by people with oily skins and by young readers.

Most of the women who use cream, want the products they buy to do more than merely cleanse. Top mention goes to the creams that cleanse as well as lubricate. Women with dry skins especially appreciate these.

The next most popular type is the general purpose cream which cleanses, lubricates, and serves as a powder base. Analysis by income groups shows decreasing preference for a cleansing and lubricating cream in the lower income brackets.

Pond's led in preference for cleansing creams with 18 per cent of those questioned saying they used it, Hudnut and Woodbury each had 9 per cent claiming their use.

Pond's also led in preference in cold cream with 32 per cent, while Wood-

Ann Haviland presents its perfume and sachet sets. Perfume nestles upon a luxurious satin sachet of the same scent.

Suzanne's "Bright Christmas" eau de cologne comes in a four ounce size, packaged in a white box decorated with green wreath and red holly berries.

A of Gres is the name of the first scent being introduced in the United States by Lamartine, S. A. This unusual scent is packaged in a heavy crystal bottle topped with a diamond cut stopper.

The Hudnut Sales Co. exclusive representative for Parfums Fragonard in the U. S., presents two French perfumes, Belle de Nuit (pictured) and Moment Vole.

Coty's envelope compact is made for loose powder and comes in gold-toned metal.

Farnesiana, latest Caron perfume presentation was inspired by the romantic warmth of the famous Afrnese palace in Rome with its exquisite murals by Raphael and the beauty of its gardens.

bury was second in demand with 12 per cent.

In general purpose cream Lady Esther was the most popular with 28 per cent, Woodbury 13 per cent, Jergens 9 per cent, Pond's 8 per cent.

Hudnut led in popularity with lubricating creams with 13 per cent, Pond's and Avon 7 per cent each, Dorothy Gray 4 per cent.

In other products used for the care of the face such as creamy lotion, Jergens was the most favored with 16 per cent claiming its use. Hudnut, Tussy, Avon, Dorothy Gray and Trushay were next in popularity in that order.

As regards skin freshener, Hudnut again led in demand, with Avon, Dorothy Gray and Elizabeth Arden runners up.

Those using face masks favored Hudnut with about 20 per cent Edna Wallace Hopper 12 per cent, Beauty Counselor 9 per cent, Luzier's 8 per cent and Merle Norman 7 per cent.

Princess Eve

Jesse Livermore has set up his own company, the Princess Eve Products Corp., named after his wife, a smartly designed line of cosmetics has been the result, with such items as lip brushes, perfume flacons and combination lipstick cases with the flacon and cigarette lighter in one.

Mr. Livermore first designs and produces an accessory, sometimes studded with gems that retails at a fabulous price, but those are just merchandising and promotion stunts. His main volume comes from the reproductions of his original pieces. The line at the present includes gold-plated lip brushes at $3.50 and flacons at $5.00. The line is pushed at the swanker stores around the country and is especially good for gift items.

Plastic Atomizer

One of the war babies that has survived the test of reconversion in the postwar world is a plastic atomizer called Xpray.

Designed in Switzerland, hard-hit by the lack of rubber in that country the atomizer is plastic and metal. The operation of the atomizer is by spring, which the manufacturers say are good for 150,000 operations. It is also claimed that it will not deteriorate in hot weather. The atomizer is made by Xpray Corporation, 280 Madison Ave., N. Y., and retails at $1.75 and $1.95.

Parfum Zofaly is featuring Passion perfume in the American market. Passion is a delightful fragrance, beautifully packaged and boxed.

Bonne Bell has introduced two new products, Plus 30 Lotion and Bonne Egg Creme Shampoo.

"Bang It, Bend It, Bounce It—You Can't Break It!"—with this theme Seaforth presents its Duralite containers, unbreakable, flexible, and featherweight, as featured in the Royal Scot set.

BLUE

stops the eye... starts the sale

PACK TO ATTRACT IN *Maryland Blue*

"Sell Faster"... see other side...

Products packed in BLUE sell faster

NOT just a container—but valuable selling and merchandising features. That's what you get when you pack in rich, royal, "eye-stopping" Maryland Blue Glass. Yes, Maryland Blue has played an important part in the sales success of many famous products. Here's why:

BLUE MAKES YOUR PRODUCT EASIER TO SEE.
BLUE MAKES YOUR PRODUCT EASIER TO REMEMBER.
BLUE MAKES YOUR PRODUCT SMARTLY MODERN.
BLUE INSURES RICH, DISTINCTIVE APPEARANCE.
BLUE STANDS OUT, ASSURES BETTER DISPLAY.
BLUE ADVERTISES YOUR PRODUCT IN THE HOME.
BLUE BUILDS PROFITS, STEPS UP REPEAT SALES.

PACK TO ATTRACT IN Maryland Blue

ALSO AVAILABLE IN CLEAR GLASS

Write today . . . tell us the nature of your product and the sizes in which it is packed . . . and let us send you samples of appropriate stock designs. Or, if you use bottles or jars in large quantities, we'll be glad to create a special design for your exclusive use.

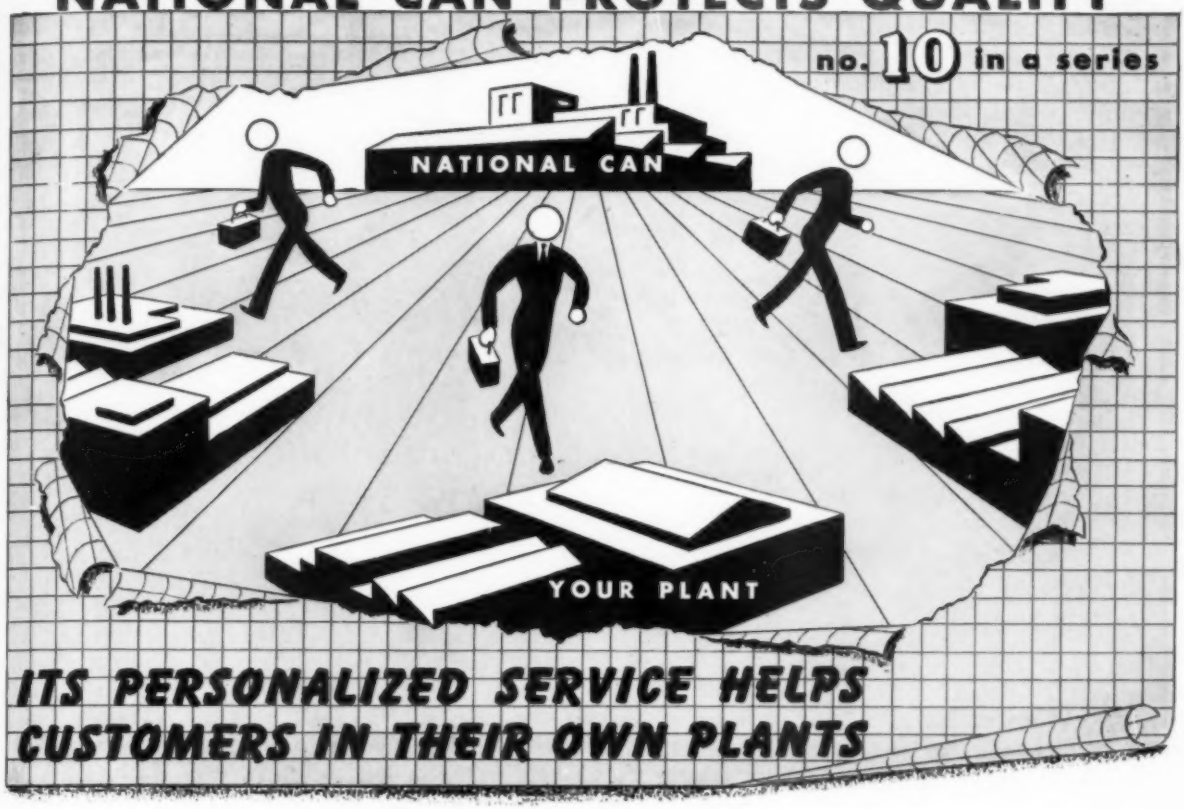
• • •

MARYLAND GLASS CORP.
BALTIMORE 30, MD.

Pictured on the preceding page are just a few of the handsome stock designs. This diagram makes them easy to identify.

1. Cabinet Square - in ½ oz. to 32 oz. sizes
2. Chesapeake Oval - in 4 oz. to 32 oz. sizes
3. Toilet Oval - - - in ½ oz. to 8 oz. sizes
4. Maryland Oval in 1⅞ dram to 32 oz. sizes
5. Squat Jar - - in 2⅝₁₆ dram to 18 cz. sizes

NATIONAL CAN PROTECTS QUALITY



Personalized service at National Can Corporation means help to you in your own work in your own plant. Based at a number of the company's factories, men experienced in can-making over 15 to 35 years are "Traveling Technicians" visiting at stated intervals packers and other users of metal containers.

Advisory and maintenance service on seamers is usually a regularly scheduled practice with users of sanitary cans whether or not these seamers were specially-built by National Can in its own machine shop, and whether the seamers were leased by National Can or owned by the customer.

A variety of specialized personnel is among these Traveling Technicians. Serving food packers are food technologists and bacteriologists on the National Can staff, and company chemists work closely with the manufacturers of sealing compounds.

NATIONAL CAN

CORPORATION

Executive Offices: 110 EAST 42nd STREET, NEW YORK 17, N. Y.

SALES OFFICES AND PLANTS IN: BALTIMORE, MD. · CHICAGO, ILL. · HAMILTON, OHIO · BOSTON, MASS. · INDIANAPOLIS, IND. · MASPETH, N. Y. · CANONSBURG, PA. · ST. LOUIS, MO.

You won't be sticking

FOUND MONEY

One of America's leading advertisers* writes, "Woman's Day produced the lowest inquiry cost of the books that we used. We subsequently have researched 1,000 of the inquiries and we find the results have been highly satisfactory. We are extremely pleased not only with the inquiry costs, but the type of new customer it produced!"

**Name upon request.*

ng your neck out

The lady illustrated hasn't got her head in the clouds. To the contrary, she's a composite of the more than 3,000,000 housewives and mothers who read Woman's Day. Her altitude is a figurative reminder that, in 1948, she will spend $10,287,000,000 to satisfy the appetites of the 11,400,000 members of her collective families:

$3,726,000,000 for Food and Drink
$1,863,000,000 for Housing and Household Appliances
$1,377,000,000 for Clothing
$ 648,000,000 for Transportation and Recreation
$ 291,000,000 for Drugs
$ 243,000,000 for Personal Services

In Woman's Day you won't be sticking your neck out in your attempts to reach her eye and ear. For Woman's Day, at the lowest page rate per thousand of any women's service magazine, enjoys the greatest single copy sale of any magazine in existence, thanks to an editorial technique that (without advertising influence) has pulled more than 600,000 reader letters and 700,000 requests for instructions in a single year . . . from the most price-conscious, economy-minded women in these United States.

Advertisers who count costs court women who count pennies.

because buying is a woman's business:

a *Woman's Day* is never done *selling!*

THE A&P MAGAZINE

Famous Plastics

FOR FAMOUS MERCHANDISE

● **There are three major features which distinguish Plaskon Molded Color for closures: utility, economy, and attractiveness.**

Plaskon molding materials are plastics that are especially resistant to the chemical and physical action of a wide variety of products that must be packaged. Plaskon is completely impervious to the effects of alcohol, acetone, or other common organic solvents. It is not affected by oils, fats or greases. Because it is odorless, tasteless and inert, it has no effect upon any products with which it comes into contact.

Plaskon plastics can be molded in large quantities at very economical prices. Distinctive designs and shapes can be secured to give new individuality to packages.

Plaskon molding materials are available in a wide range of beautiful, permanent colors that improve the appearance of any container, catch the eye and help make sales. We can give you helpful assistance in suggesting designs, qualified Plaskon molders, and technical advice so that you can efficiently adapt Plaskon* Molded Color to your manufacturing and sales programs.

The Halo Shampoo closures of blue Plaskon are molded for Colgate-Palmolive-Peet Company, Jersey City, N.J., by Colt's Mfg. Co. Hartford, Connecticut

*Reg. U.S. Pat. Off.

PLASKON DIVISION LIBBEY • OWENS • FORD GLASS CO. 2110 Sylvan Ave., Toledo 6, Ohio

Canadian Agent: Canadian Industries, Ltd., Montreal, P. Q.

PLASKON
TRADE MARK REGISTERED
MOLDED COLOR

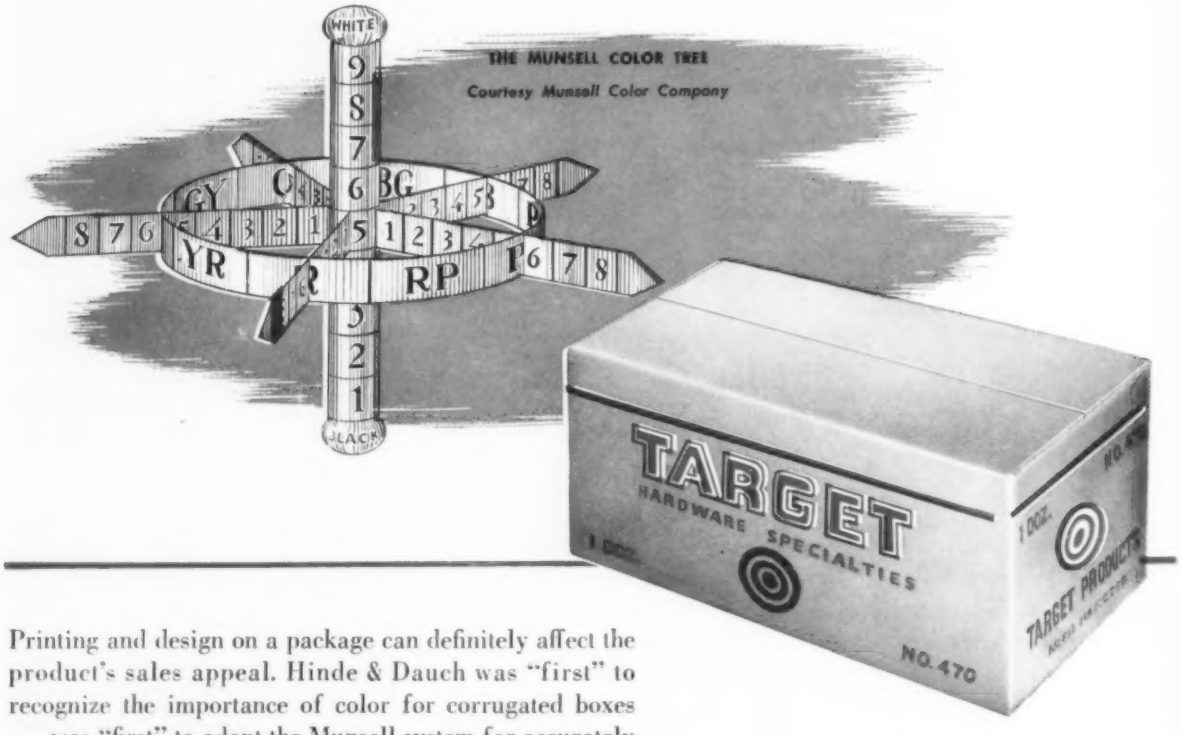
Complete service is the best service

Getting "the works" at one source is a convenient time saver. Here at Armstrong, we are equipped to supply you with a complete package. We can supply you with a glass container, any kind of closure (cork, molded or metal cap, crown, or embossed-top cork), and a du Pont CEL-O-SEAL* band. More important, by supplying you with all components, we can design the package as a unit, each part designed to blend harmoniously with the other. This complete service not only provides you with a package high in sales-appeal but also saves you a lot of time and trouble.

In the long run, it will pay you to bring your glass packaging problem to Armstrong. Our unusually large staff of engineers, designers, and research men will gladly pitch in to give you the best package modern science and experience can provide. For further information on any of Armstrong's glass or closures, contact your Armstrong representative or write to Armstrong Cork Co., Glass and Closure Div., 3811 Prince Street, Lancaster, Pa.

* REG. U. S. PAT. OFF., E. I. DU PONT DE NEMOURS CO., INC.

first to apply a standard, scientific COLOR system to corrugated box printing



Printing and design on a package can definitely affect the product's sales appeal. Hinde & Dauch was "first" to recognize the importance of color for corrugated boxes . . . was "first" to adopt the Munsell system for accurately selecting, naming and classifying color. For years, H & D customers have had complete assurance that there would be little or no variance in colors—between one box order and another. On the long list of H & D "firsts" are also PREPAK*, the unit package; DUPLEX, the shipping-display box; and the duo-use LUGGAGE BOX. These "firsts" increase sales potentials, by reducing loss from damage in transit, by cutting packaging and distribution costs. The Hinde & Dauch Paper Company, 4706 Decatur Street, Sandusky, Ohio.

LOOK TO

REG. U. S. PAT. OFF.

H&D

FOR PACKAGING "firsts"

*TRADE MARK REG. U. S. PAT. OFF.

HINDE & DAUCH · *Authority on Packaging*

FACTORIES IN: Baltimore 13, Maryland • Buffalo 6, N. Y. • Chicago 32, Illinois • Cleveland 2, Ohio • Detroit 27, Michigan • Gloucester, N. J. • Hoboken, N. J. Kansas City 19, Kansas • Lenoir, N. C. • Montreal, Quebec • Richmond 12, Virginia • St. Louis 15, Missouri • Sandusky, Ohio • Toronto, Ontario • Boston, Mass.

Brockway bottles possess a never-failing clarity that permits customers to see your merchandise in its "Sunday best".

And Brockway containers have all the other attributes you expect in genuinely good glass packaging . . . sparkling brilliance that attracts buyers . . . strength that carries your product safely . . . unvarying uniformity . . . and accurate capacity.

For really fine glass containers, remember "bottles" and "best" both begin with our "B".

BROCKWAY GLASS COMPANY, INC.,
Brockway, Penn. *Muskogee, Okla.*

BROCKWAY
GLASS
ACCENTUATES QUALITY AND GOODNESS

LOOK FOR THE B ON THE BOTTOM
The Symbol of Quality

PURE
TASTELESS
ODORLESS

VisQueen*

POLYMERIZED
ETHYLENE
FILM

Packaging Check-Chart

CHECK THESE ADVANTAGES AGAINST ANY PRODUCTS YOU ARE NOW USING

Flexible at extremely low temperatures	✓
Waterproof	✓
Low moisture vapor transmission	✓
Non-adhesive	✓
Chemically inert—no plasticizer	✓
Sealable with heat	✓
Economical	✓
Non-toxic	✓
Tasteless—odorless	✓
Variety of thicknesses—from very thin to very thick	✓
Low specific gravity	✓
Non-susceptible to humidity changes	✓
Made in clear seamless tubing or sheeting in specified widths	✓

Pure Tasteless Odorless

VisQueen*

...when you want ALL these features—specify

For complete information, write Box 1616-B,
VISKING CORPORATION, Preston Division, Terre Haute, Indiana

*U.S. Trade Mark Reg. Applied For

BRIDGEPORT

Metal Cosmetic Containers

Caps and Closures

Perfume and cosmetic manufacturers for more than a quarter of a century have recognized the precision craftsmanship of Bridgeport Metal Cosmetic Containers.

The consistent uniformity and beauty of our products has resulted in many leading manufacturers remaining as consistent users of Bridgeport Metal Containers.

When you are again planning a product that requires an original design be sure to examine the fine precision and decorative beauty of Bridgeport Products.

Bridgeport Produces

- Vanities
- Jar Caps
- Bottle Caps
- Lipstick Containers—Swivel, Slide, Automatic
- Dry and Paste Rouge Cases
- Powder Boxes
- Perfume Vial Cases and Caps
- Lip Brushes
- Drawn Talc Containers
- Miscellaneous Make-up Cases and Other Metal Specialties

THE BRIDGEPORT METAL GOODS MFG. CO.

Established in 1909

BRIDGEPORT, CONN.

PHONE BRIDGEPORT 3-3125

A Reprint from Beauty Fashion

PERFUME AND COSMETIC manufacturers are spending many millions of dollars in advertising to bring customers—interested customers—to your store.

Alert, intelligent selling means that *you*—salesgirls and store executives—know in advance *what* these customers are interested in and *why* they are interested.

Read carefully, study the advertising pages of BEAUTY FASHION each month. Because here is the record of the finest perfume and cosmetic advertising. Here each month you see not only *what* manufacturers are saying, but *how* they say it.

Use BEAUTY FASHION *to help you anticipate your customers' wants...*

Select your opal jars with care. They are your package . . . your customer's first impression of your product and your company. It is to your advantage to present your product as attractively as possible. Why not get acquainted with

CARR-LOWREY OPAL JARS?

You can see for yourself their uniform density, their brilliant whiteness, their flawless quality.

CARR-LOWREY GLASS CO.

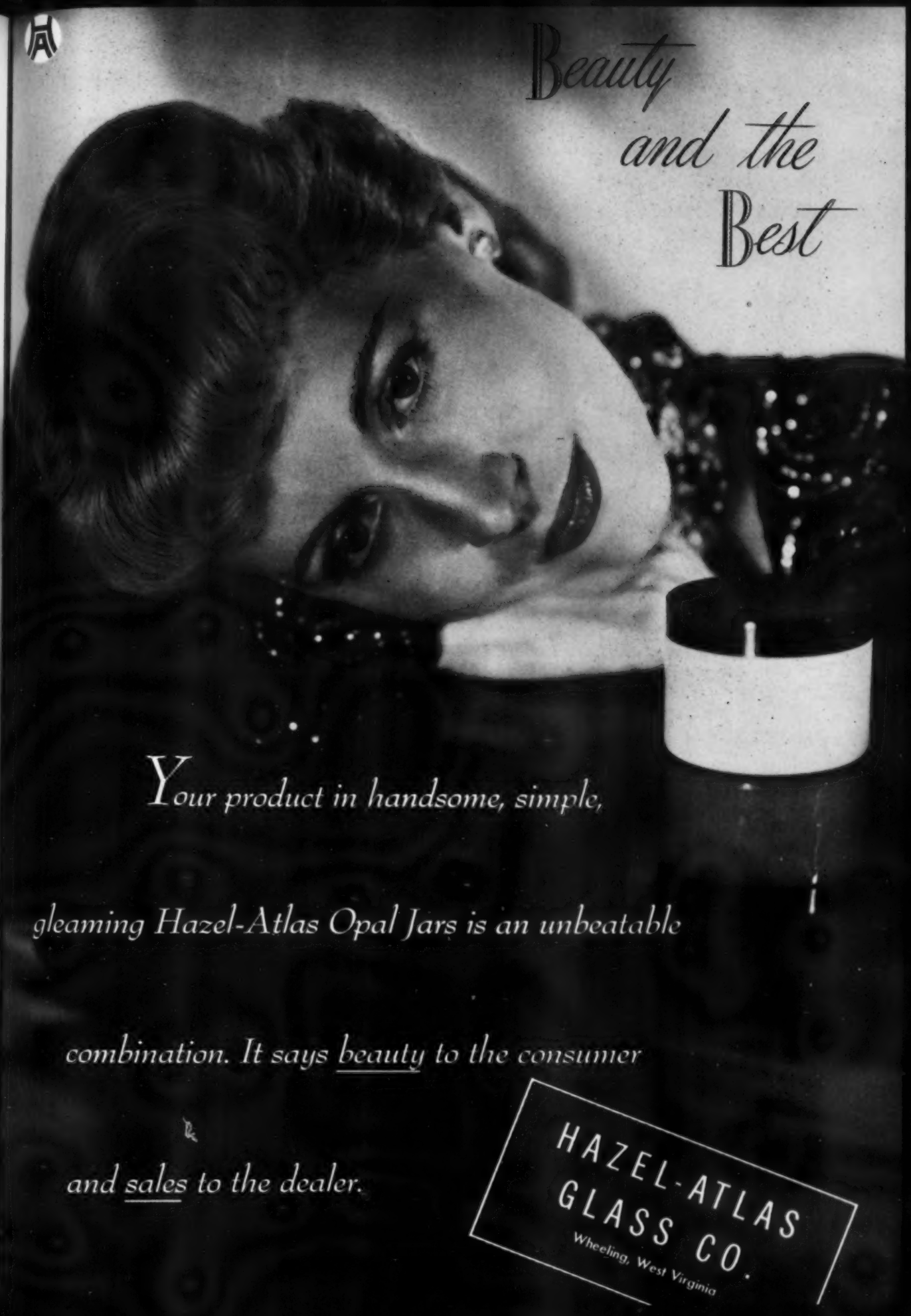
Factory and Main Office: BALTIMORE 3, MD.
New York Office: 500 FIFTH AVENUE (18)
Chicago Office: 1502 MERCHANDISE MART (54)

P-45---a new stock bottle in line with Swindell's tradition of quality

It's ready now! Swindell's new stock bottle, designed along classic lines that hold special interest for the perfume and cosmetic trade!

Available for immediate delivery in ⅛ ounce, ¼ ounce, ½ ounce, 1, 2, 3, 4, 6, 8, and 16 ounce sizes.

SWINDELL BROS., BALTIMORE, MD.
200 FIFTH AVENUE, NEW YORK • ROBERTO ORTIZ—HAVANA, CUBA


Beauty and the Best
Your product in handsome, simple, gleaming Hazel-Atlas Opal Jars is an unbeatable combination. It says beauty to the consumer and sales to the dealer.
HAZEL-ATLAS GLASS CO.
Wheeling, West Virginia

SEAL OF EFFICIENCY

★ Provides airtight seal

★ Free-floating liner

★ Liner locked in

★ No liner adhesives

★ Even sealing pressure

★ 360° thread contact

★ Speedy, low cost application

★ Designed for strength

THE ANCHOR MOLDED CAP

Anchor CONTAINERS and CAPS

PRODUCTS OF
ANCHOR HOCKING GLASS CORPORATION
LANCASTER, OHIO

HERE is a molded cap that is smartly styled and one that seals efficiently. It has a patented liner retaining ledge and recess which holds the full size liner in place but allows it to rotate freely. Since there are no adhesives used, the free-floating liner can't buckle, wrinkle or creep during sealing. That means you get a positive, air-tight and leakproof seal.

Threads of the Anchor Molded Cap are scientifically designed to give a full 360 degree contact with the glass thread. Because they're shaped to conform to the thread of the glass container, you get an even distribution of sealing pressure. Removal and reseal are easy.

If you're looking for a molded cap with an efficient seal . . . . one that goes smoothly on production lines . . . one that adds quality appeal to your package . . . is popular with retailers and consumers, you'll be wise to investigate the many advantages of this popular Anchor Molded Cap.

"Crime Photographer", Thursday evenings, entire CBS network, sells all America on glass-packaged products.

The Eyes have it...

—AND BUY IT
When it is packed
in a sparkling creation
by Foster-Forbes.

FOSTER • FORBES COSMETIC BOTTLES

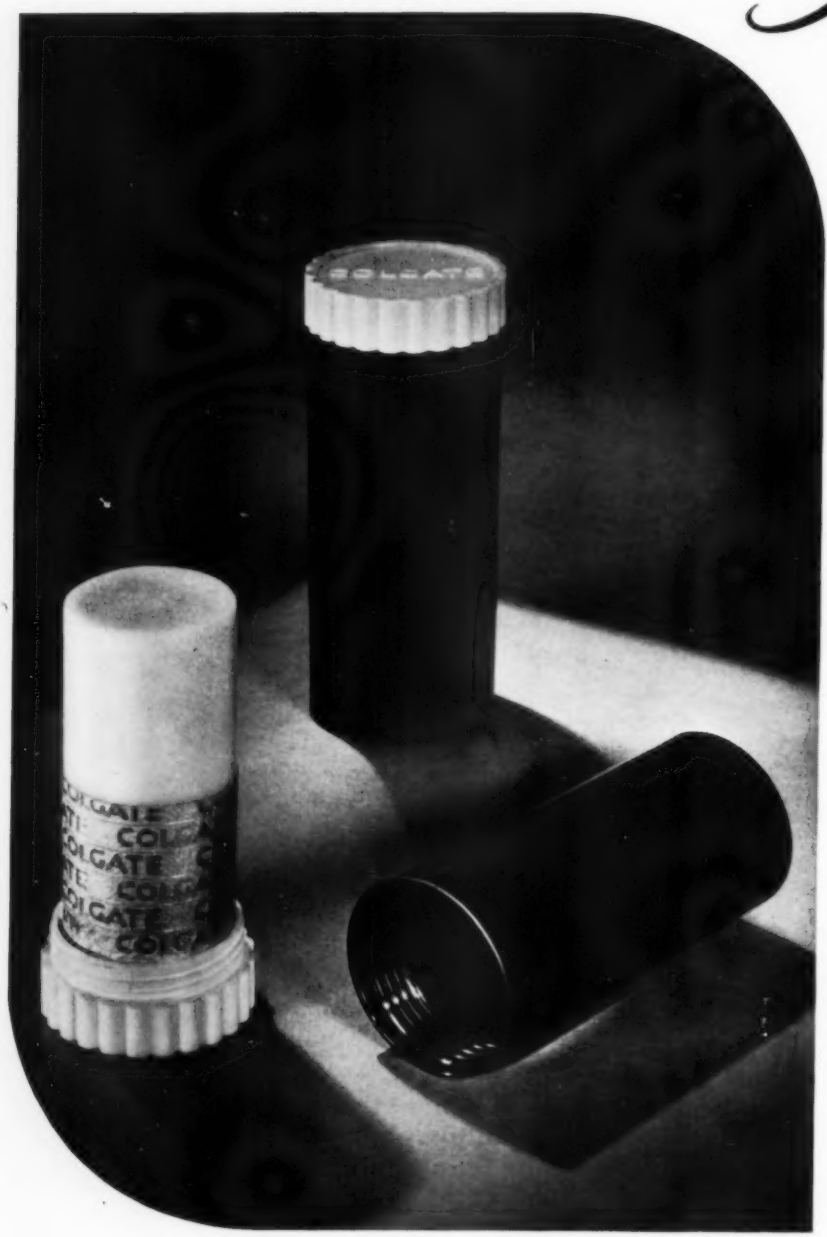
FOSTER • FORBES GLASS CO. • MARION, IND., U.S.A.

SALES REPRESENTATIVES

KANSAS CITY · DETROIT · CHICAGO · CLEVELAND
MILWAUKEE · CINCINNATI · LOUISVILLE · ST. LOUIS
ATLANTA · ST. PAUL · NEW YORK · MEMPHIS
HAVANA, CUBA

Successful Packaging--

by *Standard* CAP



Elaborate design or sheer simplicity, both are best expressed when the closure is of plastic . . . the material that comes in beautiful colors . . . that is color-fast . . . that won't scuff or scratch.

At Standard you will find an organization that is thoroughly experienced in the planning and production of private mold closures and containers. There is also a wide variety of plastic closures in standard sizes and designs from which to choose.

This all plastic container, molded by Standard for the Colgate-Palmolive-Peet Co., is indicative of the beauty and efficiency that plastics can bring to the packaging of your product.

STANDARD *Cap & Molding* COMPANY, *Inc.*

Molders of Plastic Closures

307 S. EATON STREET, BALTIMORE 24, MD. • *Offices in Principal Cities*

OUR MISS BROWN
JUST LOVES THE "NEW LOOK"
and not because she wont bear looking at, either

No . . . Miss Brown represents the fashion-minded members of our staff who have lots up their sleeves for folks like you who want your cosmetic containers to follow the fashions.

You see . . . Miss Brown loves those sloping sleeves—into which, of course, she can put a lot of things up her sleeve. Catch?

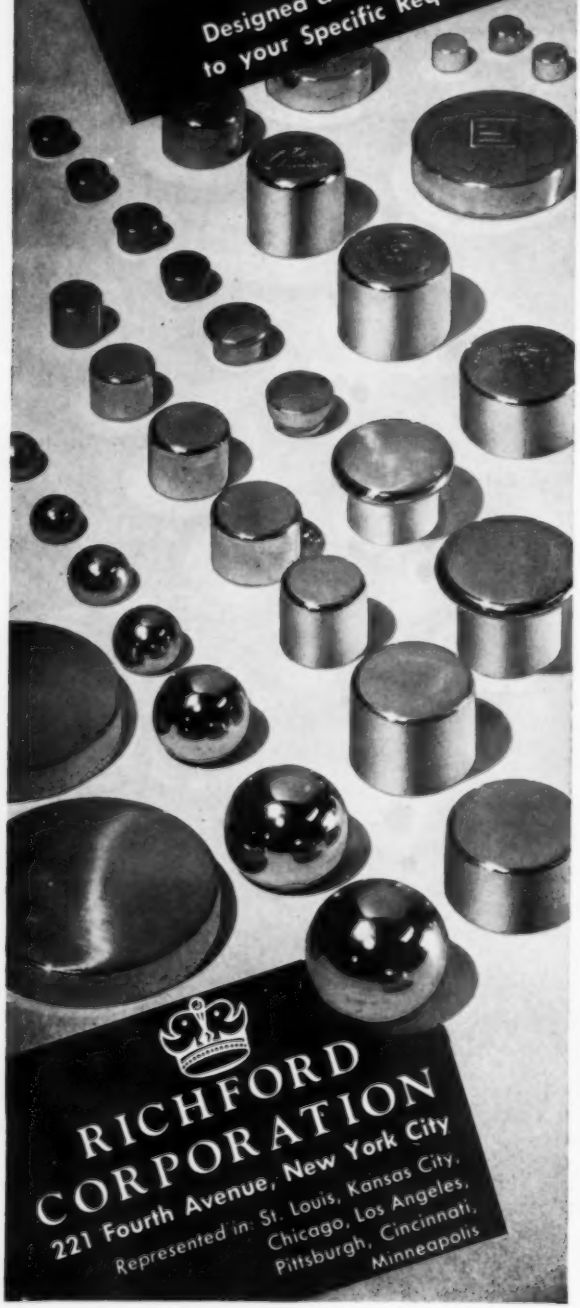
Now what Miss Brown and her pals have in store for you (should we say, "in sleeve for you"?) is for us to know and you to find out. Almost needless to tell, Scovill's cosmetic container people (who know women, and style their metal containers to complement the fashion and compliment the women) have some cute ideas about designs and finishes and constructions that should make you trouble yourself getting to us.

That's no brag, brother. Fact is—as so many surveys have shown from years past—

the Majority of the Brands in Leading Stores HAVE SCOVILL-MADE CONTAINERS

SCOVILL MANUFACTURING COMPANY · DRUG AND COSMETIC CONTAINER DIVISION 62 Mill Street Waterbury 91 Conn.

Top off
YOUR BOTTLE OR JAR with a
RICHFORD METAL CLOSURE
Any Size Plain or Embossed Any Shape
or
Designed and Manufactured
to your Specific Requirements



RICHFORD
CORPORATION
221 Fourth Avenue, New York City
Represented in: St. Louis, Kansas City,
Chicago, Los Angeles,
Pittsburgh, Cincinnati,
Minneapolis

The Sophisticated Package

Lustrously black jars, ceramically transformed out of standard flint jars by our Glass-Crafters shop! The jet black is permanently fired-in and is really swank! Available **from stock** in 1, 2, 4, 8, and 16 oz.

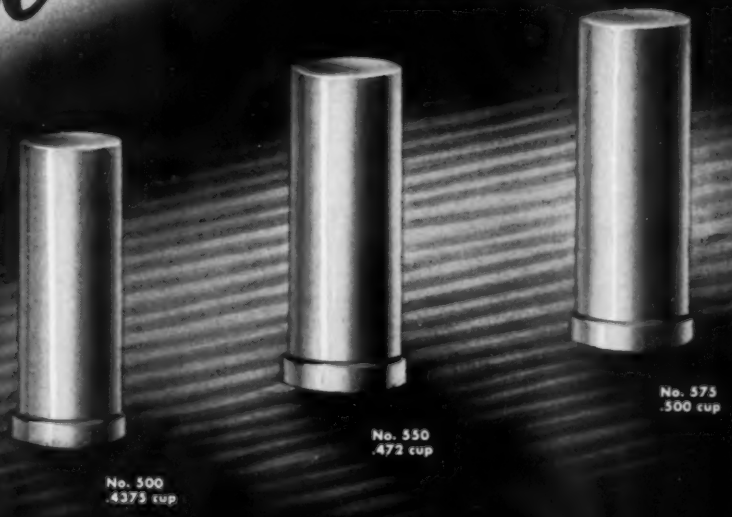
another "SHOPPER STOPPER" by Braun

W. BRAUN CO.
Glass Containers and Closures
304 N. CANAL ST. • CHICAGO 6, ILL.
347 FIFTH AVE. • NEW YORK 16, N. Y.

Use LABELS AND SEALS ..
FAITHFUL by SERVICE
JOHN HORN
835-839 TENTH AVENUE
NEW YORK 19, N.Y.
FOR OVER FIFTY YEARS
for greater sales appeal
METAL · EMBOSSED
ENGRAVED
DIE STAMPING FOR BOXMAKERS

Rich Low BRASS

SWIVEL LIPSTICK CONTAINERS



"Fashioned Like Jewels"

THE ULTIMATE IN QUALITY

- De Luxe polished Rich Low brass — baked lacquer finish
- Free wheeling mechanism — It is impossible for the filler to swivel up while the cap is on
- "Click-Tite" closure*

PHONE, WIRE OR WRITE FOR SAMPLES

BRODER INDUSTRIES

INCORPORATED

167 WEST 64th STREET, NEW YORK 23, N. Y. • TRafalgar 7-0092

*Patents Pending

THE ADDED TOUCH *in Decals*

When Nature fashioned the rose, she created something of such breathtaking beauty, and utter softness, that man for all his knowledge, can never duplicate.

We aren't trying to tell you that we can improve on Nature . . . Make a better rose . . . That's Nature's "*ADDED TOUCH*" . . . But if you want to reproduce a rose . . . A trade mark . . . A label, using as a medium *DECALS*, then *PALM FECHTELER*, the master craftsman, is your best bet.

You get years of experience and know-how with every *PALM FECHTELER DECAL*. The result is beauty of design, non-fading colors, and durability, which even Nature cannot duplicate.

The oldest manufacturer of Decals in the U. S., *PALM FECHTELER*, has come by this know-how the hard way . . . Through years of experimentation. You can put this "*ADDED TOUCH*" to work for you today, by using *PALM FECHTELER ENGRADEL DECALS*.

pf decals

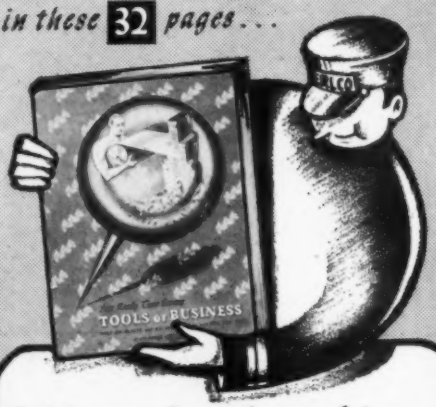
Dept. DCN

PALM FECHTELER & Co.

220 WEST 42nd STREET, NEW YORK 18, N. Y.

32 years of label experience

in these **32** *pages . . .*



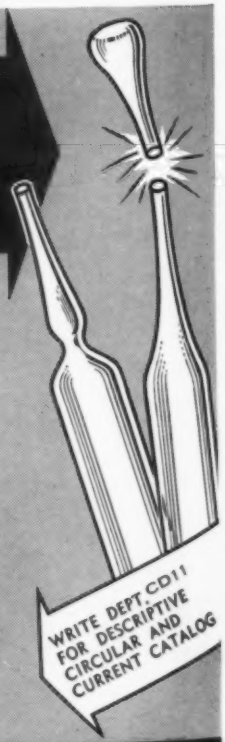
Yours for the asking

A new slant! A new approach, featuring TESTED labels, compiled in one book from the records of the largest label manufacturer in the world, serving over 50,000 customers a year — for 32 years! Send for your FREE copy and see why Ever Ready is your logical label source.

EVER READY *Label* CORP.

141-155 East 25th Street - New York 10, N. Y.

All Coby Ampoules are "VACUUM FREE" Before Snipping



Special process breaks vacuum in ampoule before snipping, to minimize the foreign particles and glass dust that may be sucked in when ampoule end is cut off.

Extensive line stocks all common sizes in both straight and constricted neck ampoules.

EXPERT GLASS BLOWERS SPECIALIZE IN COMPLETING ODD SIZES AND STYLES TO CUSTOMER'S SPECIFICATIONS.

WRITE DEPT. CD11 FOR DESCRIPTIVE CIRCULAR AND CURRENT CATALOG

THE COBY GLASS PRODUCTS COMPANY

ATTLEBORO, MASSACHUSETTS • U. S. A.

PET SHOP

If you want
eye and buy appeal

LUSTEROID vials and tubes have what it takes to catch the eye and help sell your product.

These crystal-clear plastic containers are like miniature show cases, displaying as well as protecting your product.

Feather-light yet strong, rigid and unbreakable they come in all colors of the rainbow—clear or opaque. Because they are printable, you save on labeling expense. Their lightweight saves on handling, packing and shipping costs.

Sizes from ¼" to 1-¼" in diameter and lengths up to 6". Cork, slip-on or screw-cap closures.

Write for full details.

LUSTEROID CONTAINER CO., Inc.
Formerly Lusteroid Division of Sillcocks-Miller Company

Office and Factory
10 W. PARKER AVENUE, MAPLEWOOD, N. J.
MAILING ADDRESS: SOUTH ORANGE, N. J.

Standard

.. the name to remember in

QUALITY TUBES

Standard

SPECIALTY & TUBE CO.

New Brighton, Pa.

Ph. Chaleyer Inc.

Creative Ability for Perfumes
of Individuality and Distinction

160 EAST 56th STREET, NEW YORK 22, N. Y.

NEWS...

Gen. Hawley Receives Gorgas Medal

The Association of Military Surgeons of the United States has announced that the 1947 Gorgas Medal, sponsored by Wyeth Incorporated, has been awarded to Major General Paul Ramsey Hawley, Chief Medical Director of the Veterans Administration, for his outstanding achievement in reorganizing and directing the administration's medical division.

MAJOR GEN. HAWLEY

General Hawley who was chief surgeon of the ETO in World War II, had charge of the organization of medical services for the D-Day invasion, was chosen by General Omar Bradley to head the rapidly expanding medical division of the VA in 1945. Since that time the number of doctors employed by the VA has increased from 1,900 to 7,000, and number of patients admitted monthly to hospitals from 17,000 to 45,000. His administration has been termed by President Truman as "a modern miracle of medicine."

The Gorgas was presented to General Hawley by the Associations of Mi itary Surgeons at its meeting in Boston, November 15, Frank F. Law, vice president of Wyeth made the presentation. The medal is awarded annually for outstanding achievement in the field of medicine in the armed forces. It commemorates the memory of Surgeon General William Crawford Gorgas, whose work in preventive medicine made possible the construction of the Panama Canal.

General Hawley was born in West College Corner, Ind., in 1891, the son and grandson of doctors. He received his M.D. from the University of Cincinnati in 1914. He served overseas in the First World War as a surgeon of the 334 Infantry Division. After the war he took a doctors degree in public health at Johns Hopkins, and served in the Philippines and Nicaragua.

The two greatest accomplishments made under General Hawley's administration were the removal of Veterans Administration physicians and nurses from Civil Service Control, and the establishment of a policy under which personnel, research services, and training of the large medical centers of the country have been made available to the Government hospitals. Of the Veterans Administration's 124 hospitals, more than half are affiliated with medical schools, and are giving resident training to more than 2,000 doctors.

European Chemists Honor Prof. Neuberg

The American Society of European Chemists and Pharmacists held a special session on November 5, at the Master Institute, New York, to celebrate the seventieth birthday of its honorary member, Professor Carl Neuberg. A medal sponsored by the Society was presented to the famous scientist.

Professor A. E. Gessler, vice president of Interchemical Corp., New York, was one of the speakers who recalled to the audience that the new science and terminology of Biochemistry has been created by Professor Newberg before World War I.

Professor Neuberg speaking in German, expressed his thanks to the speakers and to the officers of the Society. Looking back on his past and present experiences, Professor Neuberg expressed the belief that a peak of scientific and production activity in any country is due to the absence of prejudice and to full freedom of research. This accounts, he said, for the dominating position held in our times by the chemical industry of the U. S.

Dr. Guenther To Speak

Dr. Ernest Guenther, chief research chemist of Fritzsche Bros., Inc., will be the guest of the American Society of Perfumers at its regular monthly dinner-meeting in December. His talk will be illustrated with colored motion pictures.

The meeting will be held at the Advertising Club, 23 Park Ave., New York, on Wednesday evening December 17 at 6:00 P. M. Reservations should reach R. B. Houk, Dodge & Olcott, Inc., 180 Varick St., N. Y., not later than December 11.

Medal To Merck

For "outstanding accomplishments" of Merck & Co., in the field of pharmaceuticals George W. Merck, president of Merck & Co., received the Chemical Industry Medal for 1947 from the American section of the Society of Chemical Industry.

GEORGE W. MERCK

Mr. Merck headed the government's extensive research project on biological warfare during World War II.

Hogan Forms Own Company

Walter J. Hogan has resigned as specialist in the essential oil and aromatic chemical division of S. B. Penick & Company.

He has entered the essential oil field, forming his own company, Walter J. Hogan & Co., Inc., 20 W. 55 St., New York. The company will carry a full line of Spanish essential oils and sundries.

A graduate of Holy Cross College in 1922, Mr. Hogan has been with the industry for fifteen years. Prior to joining Penick, he was for ten years New York sales representative for W. J. Bush & Co. He started his career with Orbis Products Corp., New York.

THE NAME *New Perfection*

IS THE MARK OF

DEPENDABILITY

IN DROPPING PARTS

You can be sure that the administration of your carefully compounded preparation will be accomplished efficiently and easily when you use New Perfection Dropping Parts. Made of the highest quality materials, these parts are manufactured with the utmost skill and painstaking care for cleanliness. NEW PERFECTION Dropping Parts function properly which, together with the merit of your product, assures repeat sales.

A FULL LINE OF DROPPING PARTS FOR EVERY PACKAGING REQUIREMENT

DROPPER GLASSES

are available in a wide variety of sizes and styles to suit the individual needs of your preparation. You may have them CALIBRATED in any color for specific dosages or plain.

RUBBER PARTS

can be supplied in many styles and any color. AMEKINE (Non-swelling synthetic rubber) is used for oil-base preparations, natural rubber for other types.

SCREW CAPS

are made of plastic or metal depending upon your particular needs and are available in a complete range of sizes.

BOTTLES

in an eye-catching, modernistic style are available in combination with the dropping parts to complete your packaging needs. You have a choice of Amber, Blue, Green or Clear glass bottles in 2 cc, ⅛, ¼, ½, 1 and 2 oz. capacities.

Write for Samples and Quotations

PENNSYLVANIA GLASS PRODUCTS CO. INC.

Dropping Bottles • Dropping Parts • Medicine Droppers • Vials • Jars • Drinking Tubes • Medicine Glasses • Screw Cap Glass Rod Applicators

"GLASS GOODS OF THE BETTER KIND"

428-432 NORTH CRAIG STREET . . . PITTSBURGH (13), PA., U.S.A.

Wimpenney to New Post

William B. Wimpenney has been named director of export operations of Sharp & Dohme, Inc. He succeeds Reginald F. Chutter who has resigned.

W. B. WIMPENNEY

Mr. Wimpenney is a graduate of the University of Nebraska and has been in the drug field for 13 years. Before joining Sharp & Dohme he was treasurer and a director of Abbott Laboratories Export Corporation.

Pfister Appointed Sales Manager

Ray C. Brewster, president of Lorraine Compounds, Inc., has announced the appointment of Leonard Pfister as sales manager of the company. Mr. Pfister was formerly general sales manager of Frederick Stearns & Co., Ltd., Canada, and prior to that was with Frederick Stearns & Co., in Detroit. He was a branch manager in the sales department of E. R. Squibb & Sons before joining Stearns.

Baybank Expansion Program

An expansion program has been planned for Baybank Pharmaceuticals, Inc., the ethical products division of Chesebrough Manufacturing Co., according to Arthur D. Richardson, president of both Baybank and Chesebrough. Mr. Richardson also announced that Fred E. Hall, Baybank's vice president and general manager has been chosen to direct the program.

Mr. Hall, who has been connected in various capacities with the Chesebrough corporation for the past 28 years, was formerly general manager of Baybank's predecessor, the Pineoleum Company.

The marketing of Baybank's products will be under the direction of Olaf Oloffson, who has been appointed sales manager and director of professional service.

Sommers Drug Stores Co.

In August 1947 the Sommers Drug Stores Company, was organized by the liquidation of Sommers Stores and Thames Company, transferring the assets of these companies to the new corporation.

Sommers Stores, organized in 1912, operated 20 stores in San Antonio, Tex. The Thames Company, organized also in 1912, operated 8 similar stores in Beaumont, Tex. The new company will take over the operation of these stores, with no changes in the business.

The combined sales of Sommers Stores and Thames Company, for 1946 totaled $5,826,525 as compared with $5,291,842 in 1945. Sales and earnings for the first six months of 1947 were running at slightly below the 1946 rate with sales for that period $2,852,664 and a net profit of $68,671. With the merging of the two companies, the management feels that more efficient operations can be designed.

Rumbough Advanced By White Metal

Stanley M. Rumbough Jr., director and secretary of the White Metal Manufacturing Company, N. J., has been appointed director of sales. This position was created as part of an expanded sales program recently initiated by the company, makers of collapsible metal tubes.

Mr. Rumbough was vice president in charge of sales and traffic of Willis Air Service, which he helped to organize after his discharge from the Marine Corps where he flew fifty-one combat missions as a fighter pilot in the Pacific.

W. M. Bristol Jr. (left) and E. G. Ladewig of the Bristol-Myers Company who are on a trip around the world as they were about to leave New York October 7, aboard a Pan American plane.

Cutter Ups Dr. Ward

Cutter Laboratories has stepped Dr. Walter E. Ward up from the position of associate to full director.

Before coming to Cutter last year,

DR. WARD

Dr. Ward held an assistant professorship in medical bacteriology at the University of Southern California. He directed the communicable disease laboratory at the General Hospital and directed research in various fields of bacteriology.

Merrell Promotions

Dr. Marcus G. Van Campen has been appointed scientific advisor to Dr. Robert S. Shelton, vice president and scientific director of The Wm. S. Merrell Company.

Dr. Van Campen, will develop, supervise new research projects in the company laboratories as well as those being conducted under Merrell fellowships at various universities.

Dr. Henry Kreider has been appointed executive assistant to Dr. Shelton and in this capacity will help direct the administrative and personnel work of the scientific department.

Dr. George Sharp replaces Dr. Kreider as chief control chemist.

Dunbar Heads Nips, Inc.

Guy S. Dunbar formerly sales director and later president and general manager of Burroughs Wellcome & Co., (U.S.A.) Inc., has been elected president of and director of Nips, Inc.

New Unit for Monsanto

Construction of a new unit to produce formaldehyde for expanded output of plastic resins has been made known by Monsanto Chemical Company's plastics division. Ground has been broken for the plant at Springfield and construction is expected to be completed in 1948.

Head of Chinese Firm Visits Here

Paulin Niem, general manager and senior proprietor of the Reliance Trading Company, Shanghai, China is in this country to investigate and purchase

PAULIN NIEM

new equipment and raw materials.

The company was established in 1928 and manufactures the famous "Darkie" Tooth paste which is known and sold throughout China. The company also makes toilet soap and cosmetics.

Danco To Represent French Firm Here

Gerard J. Danco, Inc., has announced that the firm has been appointed exclusive agents for Camillim Albert & Laloue, S. A., Grasse, France.

Camilli, Albert & Laloue, originally Berenger Jeune et Albert & Bermon, were established in 1830. This firm is one of the leaders and largest producers of floral absolutes in Grasse.

Francois Camilli, president of the company is an agricultural engineer of wide renown.

Gerard J. Danco, Inc., was established in 1932 and its president Gerard J. Danco has been in the essential oil business in the United States for over twenty-five years.

Nat. Assn. of Whl's Elections

At the meeting of the National Association of Wholesalers at the Hotel Pennsylvania Joseph Kolodny was re-elected president of the Association.

The following were elected to serve on the board of trustees for the ensuing year: C. C. Caruso, Schiefelin & Company; Sid L. Darling, National-American Wholesale Lumber Assn.; Henry Matter, Wholesale Dry Goods Institute; Dr. E. L. Newcomb, National Wholesale Druggists' Association; George Van Gorter, McKesson & Robbins, Inc.; and Edward R. Bartlett, Richard Thebaut, Inc.

Seil Retires

Dr. Harvey A. Seil has retired from active work in the firm of Seil, Putt & Rudby, Inc. He will remain as a consultant however.

Earl B. Putt, founder with Dr. Seil of the firm will continue the business without changes in policy or scientific personnel.

Rex Adds Night Shift

Rex Products Corporation, manufacturers of Fifth Avenue compacts and cigarette cases is recruiting a night shift for its New Rochelle factory to take care of increased demand. The immediate goal of the new policy is to increase Rex production 100 per cent.

Henshall Advanced

The election of Stuart T. Henshall, assistant comptroller to the office of comptroller by the Sharp & Dohme

S. T. HENSHALL

board of directors has been announced by John S. Zinsser. Mr. Henshall succeeds Fred A. Platte resigned.

Mr. Henshall studied at Temple University and at the University of Pennsylvania and joined Sharp and Dohme in 1930.

Owens-Illinois West Coast Changes

C. G. Bensinger, vice president and general factories manager of the glass container division, Owens-Illinois Glass Company has been appointed vice president and general manager of the Pacific Coast division, San Francisco.

Mr. Bensinger also announced the appointment of Kenneth C. White, former sales promotion manager of the glass container division as general sales manager of the Coast division. Because of the broad expansion program for that area, W. I. Cole, will aid in the administration of the overall Coast division.

Malmstrom Moves Chicago Office

N. I. Malmstrom & Co., N. Y., has moved its Chicago offices to new quarters at 444 West Grand Ave., Chicago 10. The telephone at the new location is Superior 0461, and Stephen T. Goode is in charge of the office.

Drug Film

"Now For Tomorrow," the full color motion picture dedicated to the drug industry is enjoying quite a bit of success in Australia, according to Owens-Illinois Glass Company, producers of the film.

N. F. Leggatt, manager of Frederick Stearns & Company, division of Sterling Drug, Inc., Sydney, Australia, reports eight showings of the film in Australia and New Zealand to a total audience of 1,305 druggists and pharmacy students.

The 20-minute film presents merchandising techniques which will help the pharmacist of tomorrow to meet increasing competitive conditions. Past, present and future drug store techniques are compared. It is designed to serve as a distinct sales aid at the retail level. Groups who desire to show "Now For Tomorrow" at fall meetings may obtain prints by writing to the Prescription Ware Division, Owens-Illinois Glass Company, Toledo.

Dr. Schneller With Calco

Dr. George H. Schneller has joined the pharmaceutical department of Calco Chemical division, American Cyanamid Company, as director of pharmaceutical application.

He has wide experience in the technical aspects of the proprietary, chemical and pharmaceutical fields, having

DR. SCHNELLER

been connected with Vick Chemical Company, J. T. Baker Chemical Company and The Wm. S. Merrell Company, where he was head of pharmaceutical research.

RUTIN

by Baker

READY ON LARGE-SCALE PRODUCTION

....Highly Publicized Drug Finding Wide Use in Treatment of Capillary Fragility Associated with Hypertension

FOR SEVERAL MONTHS Baker, with its enlarged research and development program, has been producing Rutin on a pilot plant basis. We are pleased to announce that commercial production is now under way on a large-scale basis.

Send for Helpful RUTIN BULLETIN

Rutin has been found to be therapeutically valuable in the treatment of capillary fragility associated with hypertension. It has been estimated that there are in this country, about 5 million or 6 million people who have hypertension. Of this group at least a million or more would have capillary fragility. Be sure to write for Rutin bulletin and bibliography. Get all the facts.

PHARMACEUTICAL MANUFACTURERS

What Are Your Requirements?

If you plan to market any dosage form of Rutin—Baker asks for the opportunity of quoting prices and placing our literature in your hands. Please outline your monthly requirements in confidence and address your letter to: *Fine Chemical Division,* J. T. Baker Chemical Co., Phillipsburg, New Jersey.

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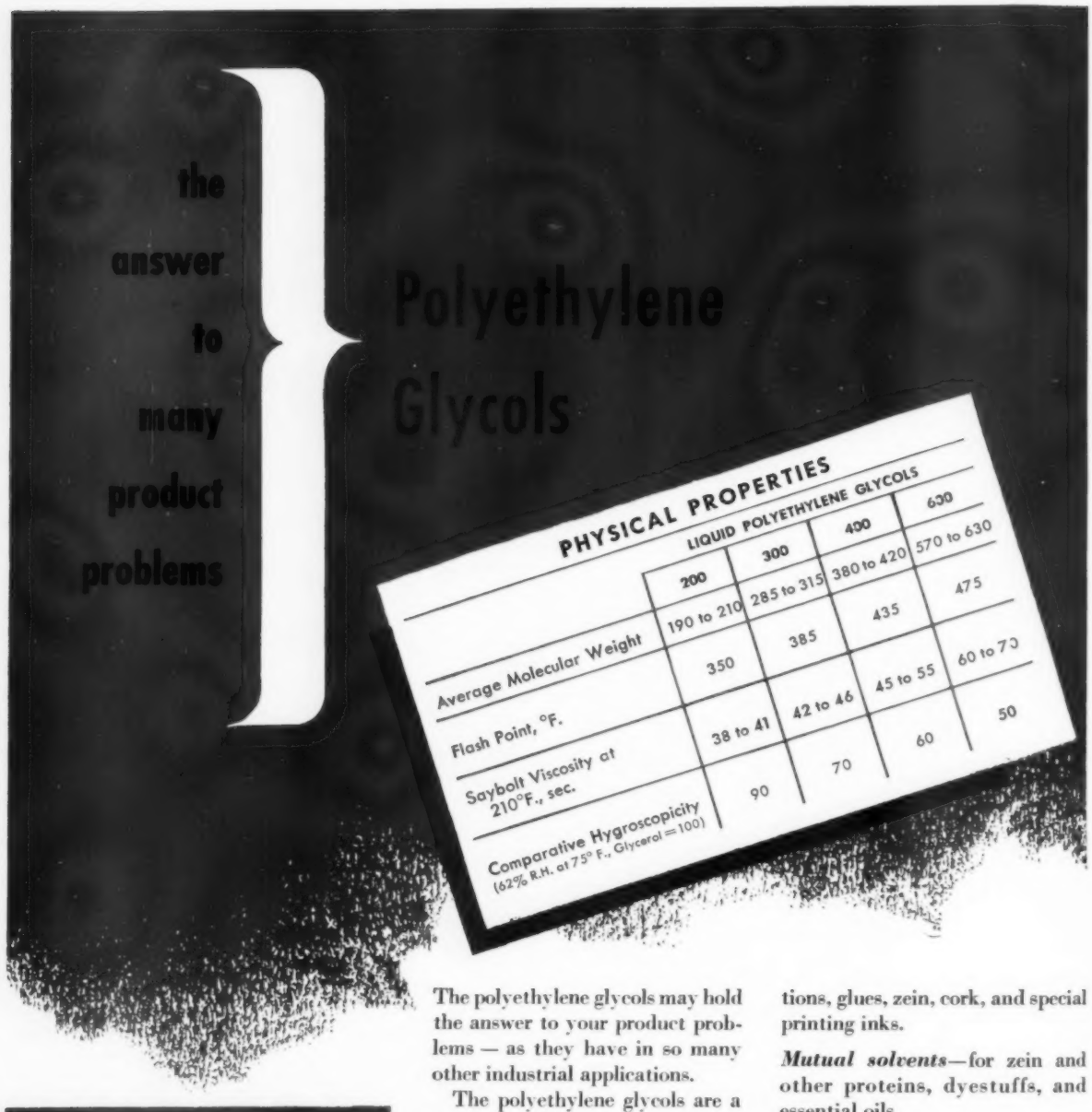


The polyethylene glycols may hold the answer to your product problems — as they have in so many other industrial applications.

The polyethylene glycols are a series of liquid polymers that are completely soluble in water and in many organic solvents. Water-white, these commercial compounds are less volatile than glycerol and hence more permanent. They are heat-stable, inert to many chemical agents, and do not hydrolyze or deteriorate. Their special characteristics can be advantageously applied in a variety of end uses.

Some present uses of polyethylene glycols

Plasticizers and dispersants—for casein and gelatin compositions, glues, zein, cork, and special printing inks.

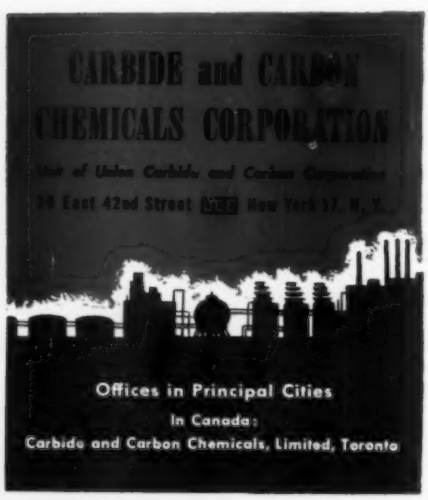
Mutual solvents—for zein and other proteins, dyestuffs, and essential oils.

Lubricants—water-soluble lubricants in warp sizes and yarn conditioners.

Intermediates—for production of alkyd-type resins — emulsifying agents—detergents.

Humectants—particularly effective because of lower vapor pressure, wide solvent power, controllable hygroscopicity, and lower viscosity.

Complete data on these versatile materials is contained in the free booklet F-4772; when writing for your copy please address Dept. F-11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Schreiber, Lever Control Chemist

Frederick W. Schreiber has joined the Pepsodent division, Lever Brothers Company, as chief control chemist.

Mr. Schreiber was with Personal Products Corp., a division of Johnson and Johnson, where he was director of research. Prior to that he was with Wyeth Inc.

F. W. SCHREIBER

Mr. Schreiber received his B.S. in chemistry from the Philadelphia College of Pharmacy and Science in 1934 and his M.A. in 1936 from the same institution.

Owens-Illinois Buys Paper Box Co.

R. L. Snideman, vice president of Owens-Illinois and general manager of the company's American Coating Mills Division, has announced the acquisition of the Grand Rapids Paper Box Company.

"Facilities of the company will be considerably expanded," Mr. Snideman said. A. R. Baker, president of the Grand Rapids Paper Box Company, is retiring and moving to Florida, and there will be no other changes in the organization. The name however was changed on November 1 to American Coating Mills Division of Owens-Illinois Glass Company, Grand Rapids Plant.

Spitzer in New Revlon Spot

Revlon Products Corporation has announced the appointment of Murray M. Spitzer as assistant advertising manager. He was formerly advertising manager for the Hecht Company and has also been associated with Macy's and Gimbel's in advertising capacity.

Tax on Cosmetics Criticized

Sharp criticism of "the discriminatory" retail excise tax on "essential cosmetics and toilet preparations" was made by Paul Douglas, president of the Toilet Goods Association, in a talk before the convention of the Associated Chain Drug Stores at the Hotel New Yorker.

Mr. Douglas said that while the government recognized cosmetics by their inclusion on every cost-of-living budget prepared by governmental authorities, nevertheless it still imposes a 20 per cent sales tax on the products of the industry.

Commenting on the difficulties which the cosmetic industry faced at the first of the year as a result of "injudicious buying and unavoidable late deliveries which resulted in heavy inventories in the stores," Mr. Douglas expressed the belief that this situation has very largely cleared up and the outlook for business over the remainder of the year "is excellent."

Ungerer Party

Personnel of both the factory and offices of Ungerer & Company, Inc., gathered for a cocktail party and dinner at the Essex Fells Club, Caldwell, N. J. At the dinner Fred Ungerer spoke and awarded yearly bonuses to the employees.

Schimmel Executive Off to South America

William Tuerck in charge of Schimmel & Co., Inc., Latin American, sales department has left for an extended trip by air to visit most of the important centers in Mexico, Central and South America.

Abbott Promotions

The promotion of two men to executive positions with Abbott Laboratories has been announced. Stanley G. Boberg has been appointed manager of drug trade promotion service. R. Blayne McCurry is named copy director.

S. G. BOBERG

Mr. Boberg joined Abbott Laboratories sales department in 1933 after serving as an officer and director of two Chicago banks. In 1937 he organized Abbott Laboratories, Ltd., in London and was appointed managing director of the branch and plant there. He returned to this country in 1940 to become manager of the Boston branch.

R. McCURRY

Before Mr. McCurry joined Abbott six months ago, he was vice president and part owner of Pictorial Publishers Indianapolis. From 1943 through 1945 he served in Navy public relations and was discharged with the rank of Lieutenant Commander.

Rexall's World Headquarters

After 43 years in Boston the executive offices of the Rexall Drug Company have moved to Los Angeles.

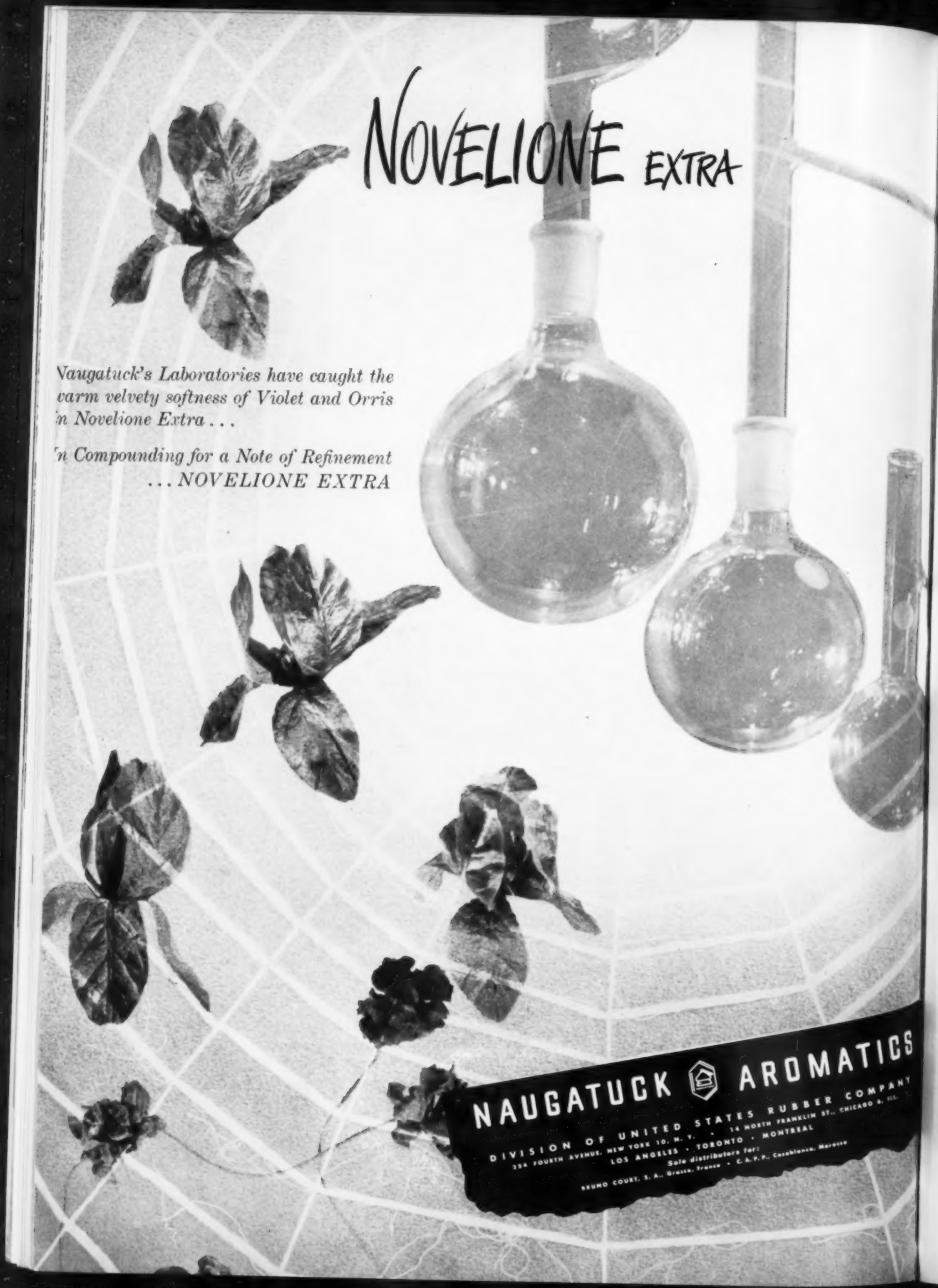
Construction of the new building began in January 1946. The structure includes the "World's largest and finest drugstore" 32,000 square feet in area, which is operated by the Owl Drug Company, a Rexall subsidiary.

The new building is located at Beverly and La Cienega Blvds. It is a reinforced concrete structure with floor dimensions of approximately 254,062 square feet. The building itself covers three acres of a six acre site and had facilities for parking 300 cars.

Four interior courts, or patios, have been included in the building to provide daylight for inside offices and to provide rest spots for employees during their lunch and relief periods.

Perhaps the most striking exterior feature of the building is its main entrance. Four polished granite rectangular columns give a feeling of lift to the building through their slim vertical lines.

There are 200 private offices, large auditorium-type offices for general employees. Seventy per cent of the interior areas have been treated acoustically.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Cincinnati Drug Assn. Formed

The Cincinnati Drug and Chemical Association has been formed by leaders of those industries in the Cincinnati area to promote the general interests of manufacturers, distributors and users of drugs and chemicals.

Forrest M. Luckett, manager of the organic chemical division of Monsanto Chemical Company, has been named president. Vice president is, R. J. Spatta, district manager of the Merchants Chemical Company. Walter M. Eller, Fritzsche Brothers is manager and secretary and Frank D. Nowland of George H. Nowland Company is treasurer.

FWDA Elections

Officers of the Federal Wholesale Druggists' Association for 1947-1948, elected at the recent annual meeting of the Association held at French Lick Springs, are: President, Glen T. Helgren, Ellicott Drug Co., Buffalo; Vice-president, Russell T. Blackwood Jr., Philadelphia Wholesale Drug Co., Philadelphia; Treasurer, George A. Raab, Providence Wholesale Drug Co., Providence, R. I.; Executive Secretary, Ray C. Schlotterer, New York; Executive Committee, John A. Crozier (chairman), Calvert Drug Co., Baltimore; Howard M. Bradbury, Washington Wholesale Drug Exchange, Washington, D. C.; Fred A. Domigan, Mutual Drug Co., Columbus, O.; George H. Montgomery, West Coast Wholesale & Drug Co., Seattle, Wash.; Addison Mize, Snowden-Mize Drug Co., Atchison, Kansas; Mat E. Schulman, Rogers Wholesalers, Inc., Jamaica, L. I., N. Y.; Clifford Marshall, Drug Trading Co., Toronto, Canada; Keith Keller, Northwestern Drug Co., Minneapolis; Sergeant at Arms, Asa B. Burdine, Washington Wholesale Drug Exchange, Washington, D. C.

Central Pharmacal's Building Program

The building phase of the Central Pharmacal Company's expansion program is now complete according to president, James L. Rogers.

Latest addition to the plant is a three story structure now occupied by the new research office. The older buildings have been remodeled with a view to better work flow. Offices have been modernized, and facilities have generally been improved.

More SKF Research Grants

Two more grants have been made by Smith, Kline & French Laboratories. One to Dr. Stanley Harris, professor of pharmacology and physiology of the dental school of Northwestern University. He will conduct research on the pharmacology of analgesia and asorexia.

The second grant has been made to support the research work by Dr. Clement A. Finch of the Harvard Medical School.

Robert J. Bowie, export manager of Bristol-Myers Company with Rudolph Aschenberger, vice president of Schilling-Hillier, Rio de Janiero, The latter firm will manufacture and distribute Bristol-Myers products in Brazil.

Swindell Brothers Name Gladding

Swindell Brothers, Inc., has appointed A. M. Gladding, general superintendent of its factories at Baltimore.

Mr. Gladding is a graduate of the Johns Hopkins University, School of Engineering. He joined Swindell Brothers in 1935 as an engineer. He served in the Army from 1940 to 1946 coming out as a Lt. Colonel.

Associated Products Appointments

Morris L. Levinson, president of Associated Products Inc., has announced the election of Herbert D. Rosenthal as vice president in charge of sales for Associated. Mr. Rosenthal was vice president and general sales manager of Pinaud and Company and previous to this was general sales manager for Helena Rubenstein. Jack D. O'Connor has been named assistant sales manager. He has been in charge of chain store sales.

Dr. Hansen Named V.P.

Appointment of Dr. Harold L. Hansen as vice president of Winthrop-Stearns Inc., has been announced by Dr. Theodore G. Klumpp.

Dr. Hansen first became associated with Winthrop in 1942 when he was appointed administrative assistant to the president and assistant manager of the plant at Rennselaer, N. Y. In that capacity his duties entailed hiring key members of the scientific staff of what is now the Sterling-Winthrop Research Institute.

A graduate from Nebraska Wesleyan University in 1928, Dr. Hansen, received his Ph.D. in 1932, from Northwestern University. He remained at the latter from 1931 to 1938, first as instructor in chemistry, later as assistant professor.

d'Ancona Visits Chicago Branch

Benjamin d'Ancona, secretary of Polak & Schwarz, Inc., and formerly head of the firm's perfume division in Paris has been visiting the newly established midwestern branch in Chicago.

Hahn Joins Kathryn Inc.

Kathryn, Inc., announces the appointment of John G. Hahn as advertising manager. He will be in charge of all advertising and sales promotion affairs.

NWDA Elections

McKesson & Robbins, Inc., are well represented in the National Wholesale Druggists' Association, at the associations 1947 convention. Four members of the company were elected as officers.

John W. Allen, who was elected first vice president, is manager of the Dallas division of McKesson & Robbins. Charles D. Doerr, elected third vice president of NWDA is vice president in charge of personnel for McKesson & Robbins. Philip D. Reitz, elected fifth vice president of the association is manager of McKesson & Robbins, San Francisco division, and Sam Dunlap, Jr., elected a member of the Board of Control of the NWDA, is district sales manager of McKesson & Robbins for the South Atlantic region.

Foundation Products Inc. Formed

Foundation Products, Inc., 3757 Wilshire Boulevard, Los Angeles, Calif., has been formed for the production of pharmaceutical specialties and food supplements. Thomas W. Judge is president of the company.

Francois Goby's Daughter Weds

The daughter of Francois Goby was married to Henri Ramet in Grasse, France, October 25, 1947.

Lydon Brothers Move

Lydon Brothers Inc., has moved from Jersey City, to new quarters at 85 Zabriskie St., Hackensack, N. J.

New Jersey Mach. on West Coast

The New Jersey Machine Corporation has opened a branch office at

P. L. HEGUY

2500 W. 6 St., Los Angeles.

Peter L. Heguy will manage the office and the service department will be under the supervision of Richard Tank.

Mr. Heguy is a graduate engineer and has been with the company for nine years. Mr. Tank is a veteran of twenty-three years.

RICHARD TANK

Cosmetic Chemists To Meet

The Society of Cosmetic Chemists will hold a meeting December 3 at the Biltmore Hotel, New York, It is scheduled to start at 10 and run through the afternoon. Papers will be presented by Dr. Raymond E. Kirk, of Polytechnic Institute of Brooklyn; Dr. L. C. Barail, United States Testing Company, Inc.; Dr. E. C. McDonough, Evans Chemetics; Edward Sagarin, Givaudan-Delawanna, Inc.; Dr. S. H. Newburger, Food and Drug Administration, and Henry C. Speel, The Alrose Chemical Company.

Madame Roure Honored

Madame Louis Roure wife of the founder of Roure-DuPont Inc., has received the French Legion of Honor for her valuable services during the war and her many activities in charitable work.

Stokes & Smith Elections

Stokes & Smith Company, Philadelphia has announced the election of the following officers: Charles Evans, chairman of the board and treasurer; Carl E. Schaeffer, president; George Sutton, vice president; L. W. Findlay, vice president; Charles H. Nitsch, vice president, and John S. Stokes, Jr.., assistant to the president and secretary.

Edward Lowell Inc., Expands

Edward I. Lowell has announced the incorporation and expansion of the aromatics and essential oil business of Edward I. Lowell, 289 Pearl St., New York.

Mr. Lowell will continue to act as head of the company in the capacity of president and Martin Mandell has joined the company as general manager. Additional laboratory personnel has been added and it is planned to add to the sales force.

MM&R's New Representative

At a dinner held at the Manhattan Club, October 7, in New York, Miller Burgin, new Southwestern representative for Magnus, Mabee & Reynard was feted. He will represent MM&R in Texas, Oklahoma, Kansas, Mississippi, Arkansas and Louisiana.

A native of Texas, Mr. Burgin graduated from Georgia Tech and was for some years with the Coca Cola Company in New England. During the war he served as a Major in the Infantry.

Way Joins Smith, Kline & French

Smith, Kline & French Laboratories announced the appointment of Gordon T. Way as personnel manager. Mr. Way, a graduate of the University of Pennsylvania in 1938, has been with the company since 1942.

Mallinckrodt Appoints New Kansas City Rep.

Mallinckrodt Chemical Works has appointed Eldon W. Michaels as its sales representative for the territory comprising Western Missouri, Kansas and Colorado. He will make his headquarters at 428 W. 67 St., Kansas City.

Upjohn Opens Chicago Branch

On the first of the year, The Upjohn Company, will open a branch office and warehouse at 1001 E. 87 St., Chicago.

John W. Schma, former sales manager

JOHN SCHMA

of the Kalamazoo branch, will be sales manager, and Fred O. Chapman, former office manager of the Cleveland branch, has been appointed office manager.

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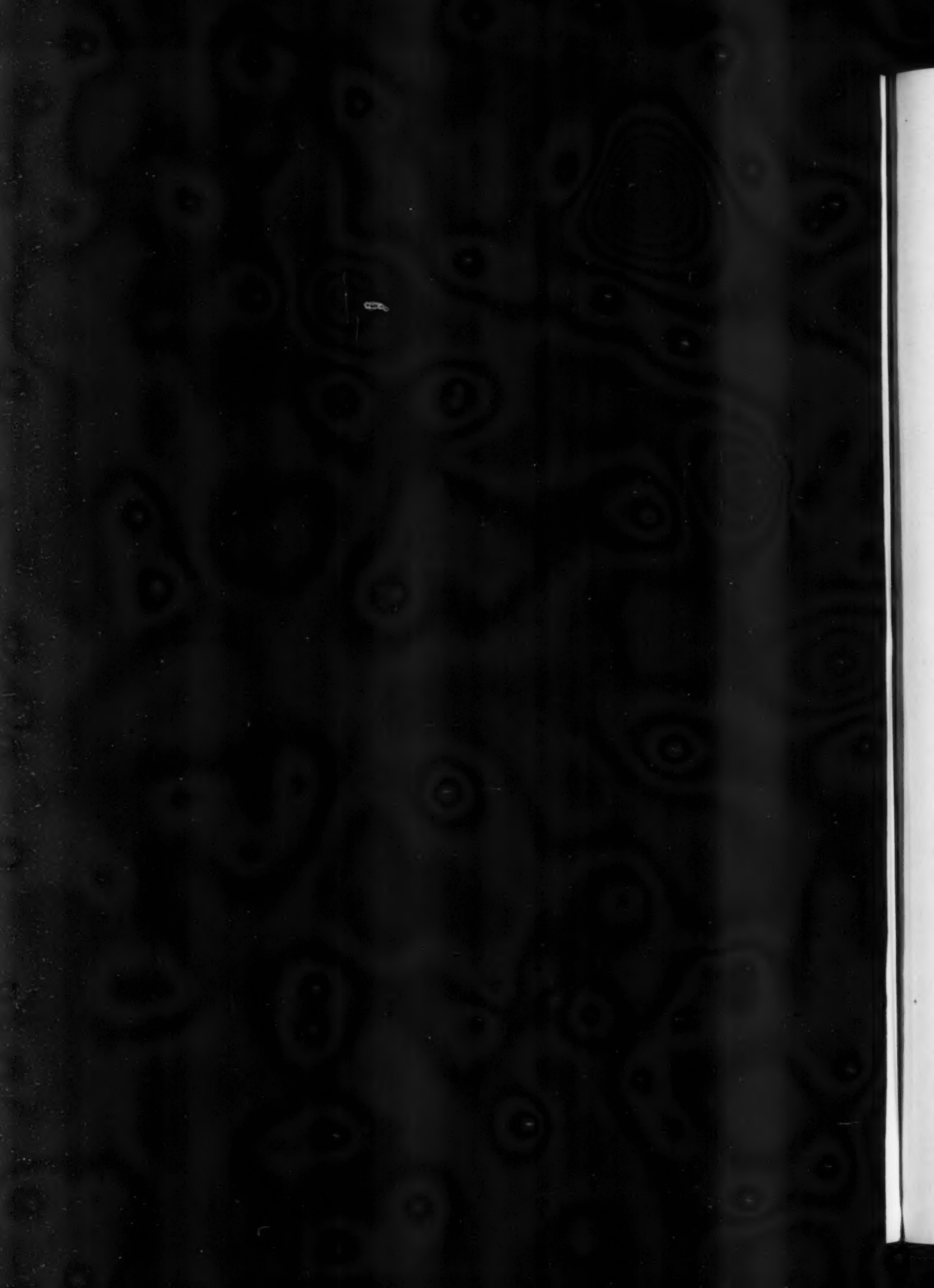

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U.S.I. CHEMICAL NEWS

November ★ A Monthly Series for Chemists and Executives of the Solvents and Chemical Consuming Industries ★ 1947

Finds Methionine Aids Utilization of Protein

Work performed recently indicates that the addition of small quantities of methionine to a ration containing protein significantly increased the nitrogen retention of lambs. From this fact, the investigators conclude that if the use of methionine has an effect upon the nitrogen retention of lambs, it may have a similar effect upon gains in weight in feed lot operations.

In the experiment 0.2 per cent methionine was added to a ration containing 10 per cent protein, with urea furnishing 40 per cent of the total nitrogen. The use of methionine "significantly increased the nitrogen retention."

Methionine, one of the ten amino acids necessary for the growth and repair of animal tissue, is now available for commercial consumption by U.S.I. It has great potential use in manufactured feeds, since small additions to vegetable protein increase biological efficiency and allow replacement of marine or animal protein now in short supply. The compound also is in demand for numerous pharmaceutical uses.

New 'Tracer' Compound To Speed Cancer Research

What is believed to be the first preparation of isotopic methyl iodide, a compound containing tracer carbon 13 in an improved form, has been completed in an eastern research laboratory. This new compound will provide research workers with carbon 13 in a highly usable form that will save steps in synthesis, the manufacturer states. Previously, heavy carbon supplied to researchers required further extensive chemical treatment before actual use. The carbon isotope is especially important in studies of the growth and chemical reactions of cells, including abnormal cell growth as in cancer.

Index of Refraction Determined by New Method

A description of what appears to be a new method for determining the index of refraction of thin films is contained in an article published recently in a prominent scientific journal. The method is based upon the interference pattern obtained with high frequency discharges in air at a pressure of about one mm. by the use of external electrodes surrounding a glass tube.

New Method for Bonding Polyethylene to Metal

The difficult problem of bonding polyethylene plastics to metal has been solved in England, according to a recent announcement. In the new process, the metal surface is first sprayed by means of a flame gun with a solid polyalkylene sulphide. The polyethylene is then applied over this coating either in a fused state or from a solvent solution at high temperatures.

Progress In Pyrenones Revealed At Recent Meeting of A.C.S.

Chemistry of New Potent Insecticidal Chemicals, Piperonyl Cyclonene and Piperonyl Butoxide, Is Disclosed

Papers were presented at the recent meeting of the American Chemical Society by Dr. O. F. Hedenburg, Fellow of Mellon Institute, and Dr. H. J. Wachs, Chief Research Chemist of Dodge & Olcott, Inc., disclosing the chemistry of the new insecticidal chemicals piperonyl cyclonene and piperonyl butoxide.

The development of D & O Pyrenones — unique combinations of the new potent pyrethrin synergists, piperonyl cyclonene and piperonyl butoxide, with pyrethrins — is the result of constant experimentation and testing. Here, in the Entomological Division of Dodge & Olcott, located in U.S.I.'s Baltimore laboratory, the effectiveness of insecticidal sprays that form long-lasting invisible deposits is being tested. A trained research chemist is applying surface spray to one square foot of unfinished plywood.

At the request of the Department of Agriculture authorities, the chemical compound known as "piperonyl cyclohexenone" has been rechristened "piperonyl cyclonene," in order to avoid possible confusion.

Amazing Synergists

These chemicals display

MORE

Novel Process Recovers Wax From Sugar Cane

A process that recovers the valuable hard wax that forms a thin coating on growing sugar cane was announced recently by government scientists. The process, which makes use of ethyl alcohol and acetone, is now being developed commercially on a small scale.

In general, sugar-cane wax resembles carnauba wax, the basic ingredient of high-grade wax polishes, which for many years has been an important import item. In 1940, for example, imports of less than 17,000,000 pounds of carnauba were valued at $8,000,000. Carnauba wax is painstakingly removed from the fresh young leaves of a Brazilian palm by drying the leaves and then beating them together.

The existence of the wax on sugar cane has been known for many years, but a ton of cane bears only two to three pounds of wax. Up to the time of the discovery of the new process, direct recovery of the wax was too expensive by any common method.

New Chemical Dictionary

The *Concise Chemical and Technical Dictionary* which presents 50,000 definitions of terms used in chemistry has been published recently by a New York firm.

U.S.I. Exhibits in Annual Paint Industries' Show

Major products of U. S. Industrial Chemicals, Inc. which are used in the protective coatings industry will highlight the firm's exhibit at the 12th Annual Paint Industries' Show held this month at The Ambassador Hotel in Atlantic City.

The show is being held in conjunction with the silver anniversary celebration of the Federation of Paint and Varnish Production Clubs, November 7-10, and the 59th Annual Convention of the National Paint, Varnish and Lacquer Association, November 11-14.

Featured products at the U.S.I. exhibit (booths 21 and 22) are industrial alcohol and solvents, and natural and synthetic resins. Samples of these products are on display and available for inspection.

CONTINUED **Progress**

In Pyrenones Revealed

amazing synergism with pyrethrins, and their effective and economical use in insecticides is based on this fact. D & O's Pyrenone (Reg. U. S. Pat. Off.) Concentrates combine these chemicals with pyrethrins in the proper proportions and in the type of formulation best suited for use in various types of finished insecticides.

Suitable Pyrenone Concentrates have been developed, thoroughly studied, and are now available for the formulation of practically all types of insecticides including household sprays, livestock sprays, aerosols, roach and flea powders, wettable powders, agricultural dusts, horticultural sprays, residual sprays, and similar items.

The most valuable feature of Pyrenone Concentrates and insecticides made from them — and one which takes precedence even over effectiveness and economy — is their remarkable freedom from toxicity to humans and animals. Their use is free from health hazards.

New *ASTM* Books Available On Metals, Diesel Fuels

The American Society for Testing Materials are now offering a completely revised edition of their 402-page *Chemical Analysis of Metals* as well as a 44-page booklet of eight non-technical papers on diesel fuels. The metals book gives complete coverage of the analytical methods for ferrous and non-ferrous alloys. The diesel booklet is designed to answer problems in the use of diesel fuels.

Accurate Gas Analysis

A new electronic device which analyzes mixtures of gases by measuring the speed of sound waves that pass through a gas-filled tube was announced recently at a meeting of a prominent American scientific group. The device is said to have been used successfully in testing air contaminated by methane or carbon dioxide, and may prove valuable in some manufacturing process, it was stated.

Facts About Acetic Esters

Acetates were discovered about 1760 . . . They are still among the most useful esters employed as flavoring ingredients . . . Most acetates have a pear flavor . . . Ethyl acetate finds wide use because of its solvent properties, and is an excellent blending agent.

Original Research Data Amassed on Soybeans

Research on the oil content of soybeans in storage shows that no oil is lost from beans during their storage prior to processing, contrary to the commonly held belief that such oil content diminishes during storage. This and other results of research into both food and industrial uses of soybeans by a U. S. government bureau were reported recently.

In other studies on the industrial side, the government laboratory has worked out a method for the precise determination of the composition of oils and oilseeds. This, it is said, should lead to a more accurate determination of the quality of paint oils made from soybeans. In addition, a new synthetic resin made by modification of soybean oil, and developed for use as a heat-sealing agent, went into full-scale commercial production this year.

The laboratory already has completed several studies on the utilization of soybeans as food for human beings and has laid a firm foundation for further investigations along this line. Still another new process developed in the laboratory separates soybean oil into two fractions, each of which is better than the whole oil for certain purposes. One fraction makes a superior paint oil; the other, an edible oil suitable for shortenings.

New Colors From Soap

Bright new colors for rayon and other materials have been made available by a recent study of the use of soapy substances as an aid to dyeing, according to investigations conducted recently at a western university. Less than one per cent of soap or detergent added to water can often make possible the use of a dye which is ordinarily insoluble, the investigators stated.

TECHNICAL DEVELOPMENTS

Further information on these items may be obtained by writing to U.S.I.

To improve natural drying oils, a new product is now on the market which is described as a modifier and extender of natural drying oils, such as soya and linseed. **(No. 255)**

USI

To increase the life of concrete, a new air-entraining agent has been produced which is said to increase workability of concrete and mortars and to minimize bleeding. **(No. 256)**

USI

A new review on advances in animal nutrition is now available in the form of a pamphlet free of charge. **(No. 257)**

USI

A bloom inhibitor, which has wide application in natural rubber and mixtures of natural rubber and GR-S, is said to retard fatty acid and sulfur blooms. **(No. 258)**

USI

To simplify yarn and fiber processing, a new series of cationic surface-active chemicals have been announced, which are said to be useful as well in insecticides, agricultural sprays, and fat-liquoring of leather. **(No. 259)**

USI

A rapid brush cleaner, described as harmless to hands and brushes, non-flammable and stainless, is said to remove any type of paint or enamel from brush bristles in two easy steps. **(No. 260)**

USI

A permanent plastic repair material, used to join similar and non-similar thermoplastics, as well as cloth, leather, wood, and paper, is alleged to act within a few seconds. **(No. 261)**

USI

A new coating for spray booth interiors is described as a non-inflammable, non-oily, non-caustic, and non-corrosive creamy compound, said to be a quick way to solve the problem of protecting interior surfaces of spray booths. **(No. 262)**

USI

An adhesive that will "stick to anything" is said to form a permanent and non-crystallizing bond unaffected by normal temperature or humidity extremes. **(No. 263)**

USI

Synthetic Vitamin A is now being produced commercially. It is said to have a biological potency equal to that of the natural vitamin. **(No. 264)**

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5-Chloro-2-pentanone
5-Diethylamino-2-pentanone
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Dodge & Olcott Sales Conference

Dodge & Olcott, Inc., in its recent five day sales conference held at the Hotel Pennsylvania had a sales clinic, forum and refresher course all rolled into one. An entire day was devoted to the inspection of the company's plant in Bayonne and the rest of the time was devoted to an analysis of production and purchasing problems which currently confront D & O customers.

Swedish Company Opens Here

One of the leading pharmaceutical houses of Sweden, A. B. Astra, Sodertalje, Sweden has opened a subsidiary in New York known as Astra Pharmaceutical Products, Inc., located at 444 Madison Ave. The firm is acting as a purchasing office for the main company and its associated companies in Sweden. Erik Bjaringer is in charge of the office. The telephone is Plaza 8-1510.

Bristol Labs. Ltd. Formed

The formation of a subsidiary company, Bristol Laboratories of Canada Ltd., has been announced by Frederic N. Schwartz, president of Bristol Laboratories, Inc.

The Canadian form, with offices at 286 St. Paul St., Montreal, will have sales representatives in the principal cities of the Dominion.

Officers in Bristol Laboratories of Canada Ltd. are: Henry P. Bristol, chairman of the board; James G. Stenhouse, president; Frederic N. Schwartz, Richard A. Anderson, J. Harmon Andrews, James P. Gledhill and Dr. Philip I. Bowman, vice presidents; Robert C. Gasen, treasurer; Walter H. Kamp, comptroller; George S. McMillan, secretary; Donald L. Sanders, assistant secretary and Philip Y. Shotter assistant treasurer.

Bill Succeeds Lohrberg as Gen. Sales Director

The appointment of John G. Bill to the position of general sales director of Sharp & Dohme, Inc., succeeding Rowland O. Lohrberg who resigned from the company.

JOHN BILL

A veteran of over twenty-two years with Sharp & Dohme, Mr. Bill joined the company as a sales representative in 1925. He was called to the general sales offices in 1937 to serve as assistant to the general sales director. A year later, in 1938, he was placed in charge of wholesale and chain store operations and in 1940 was made director of the wholesale division.

In 1945, Mr. Bill was appointed director of distribution with complete responsibility for branch operations, as well as product marketing procedure.

Koenigsberger Joins Maurella

Maurella Products Co., Inc., has announced the appointment of Sidney Koenigsberger, formerly sales manager of the House of Tre-Jur, as general sales manager. He will make his headquarters at the company's general offices, 100 Varick St., New York.

A view of the new building recently completed by The Upjohn Company for its Chicago branch.

Chaleyer Returns From Europe

Ph. Chaleyer, president of Ph. Chaleyer, Inc., New York has returned to this country after an extended trip through Europe.

Mr. Chaleyer, in commenting on conditions in Europe stated that, "Contrary to some reports, the French were quite optimistic about the future. However, there is no minimizing the difficulties that confront them. One of the main difficulties is the shortage of coal, which in turn has led to a shut-down of electricity two days a week, setting back production."

Mr. Chaleyer pointed out the progress made by both America and France in the perfume industry, and the way the products of the two countries complement one another. It is apparent that the French Industry is very receptive to new products and new ideas coming from the United States.

SKF Chemist Wins Karr Award

Paul A. Geary, a research chemist for Smith, Kline & French Laboratories since 1946 has been awarded the second Walter G. Karr Fellowship which will finance post graduate studies in physical chemistry at the University of Pennsylvania.

The Karr Fellowship will permit Mr. Geary to continue his work leading to a M.A. in physical chemistry. The Fellowship was established in 1946 for scientific personnel who are employees of Smith, Kline & French who wish to continue their academic studies.

Cal. Fruit Growers Promotions

Appointment of Donald R. Thompson as assistant manager of the California Fruit Growers Exchange products department, a new post, has been announced by M. L. Chapman.

Mr. Thompson has been with the organization since 1927, graduated from California Institute of Technology as a chemical engineer.

J. L. Gilbert in charge of sales in Southern California, has been promoted to succeed Thompson.

Formerly in charge of national sales of consumer goods for the products department, C. B. Hanson Jr., was appointed advertising and sales promotion manager. H. W. Thompson succeeds Hanson as consumer goods sales manager.

Eric Miller, has been appointed export manager in charge of the export department.

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PFIZER
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White crystalline salt
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3 grams per 100 cc of water
Readily soluble at high temperatures

PFIZER
COPPER GLUCONATE

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PFIZER
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Brown Heads A.N.A.

Robert B. Brown, vice president of Bristol-Myers Company, was elected chairman of the Board of the Association of National Advertisers at the

ROBERT B. BROWN

association's annual meeting October 7.

Mr. Brown has been with Bristol-Myers since 1936 and has served in the capacity as advertising manager and director of advertising and market research. He was elected assistant vice president of Bristol-Myers in 1939, and a vice president in 1946.

Malmstrom Names Coast Rep.

N. I. Malmstrom & Company, N. Y. has appointed Martin, Hoyt & Milne as its representatives on the West Coast. Offices are at 906 East Third St., Los Angeles 13; Merchants Exchange Building, San Francisco, 4; 902 N. W. 14 Ave., Portland 9, Oregon; 1016 First Ave., South, Seattle 4.

Packaging Institute Elections

The Packaging Machinery Manufacturers' Institute held its fifteenth annual meeting in Springfield, Mass. early in October.

George Von Hofe, president of the New Jersey Machine Corporation, was re-elected president of the Institute.

Vice presidents are: John P. Corley, vice president of Miller Wrapping & Sealing Machine Company, and Howard R. Stewart, general manager Economic Machinery Company, Worcester, Mass.

Elected to the board of directors were: H. Kirke Becker, President, Peters Machinery Company, Harry L. Cohen, vice president, S&S Corrugated Paper Machinery Company, and M. H. Pendergast, vice president Lynch Package Machinery Company.

They succeeded Harry A. Miller, Burt Machine Company, Boyd H. Redner, Battle Creek Wrapping Machine Company, and Oscar W. Wikstrom, U. S. Automatic Box Machinery Company, who had completed a three year term on the directorate.

Sharp & Dohme Expansion

Sharp & Dohme, Inc. has announced that it has concluded arrangements with the Penn Mutual Life Insurance Company and the New York Life Insurance Company for an $8,000,000 loan.

The purpose of the financing is in part to repay temporary bank loans incurred in connection with the recent purchase of the former SKF war plant near North Wales, Pa., to which Sharp & Dohme expects ultimately to move its entire pharmaceutical and biological manufacturing operations. It will also provide funds for additional buildings and facilities at that location, as well as working capital required for the company's expanding business.

Dr. Suter Heads Sterling-Winthrop Institute

Dr. C. M. Suter, identified with the research activities of Sterling Drug Inc., since 1942, has been elected divisional vice president of the Sterling-Winthrop Research Institute, Rensselaer, N. Y. Associate director of the Institute since it was organized as a separate Sterling division in 1946, Dr. Suter was four years director of chemical research of Winthrop Chemical Company, Inc., now Winthrop Stearns, Inc.

Schwartz With Boston Drug & Chem.

A. J. Schwartz, formerly with the Royal Mfg. Company of Duquesne and McKesson and Robbins, has been elected vice president, in charge of sales of the Boston Drug and Chemical Company, Inc. H. Arthur Daviau has been named treasurer, in charge of purchases.

Hills Elected Secretary of Sterling

Election of George S. Hills as secretary of Sterling Drug Inc., of which he is a director, has been announced by James Hill, Jr., president. He succeeds Miss S. E. Park, retired, who joined the company in 1903.

Mr. Hills, who is a member of the law firm of Rodgers, Hoge and Hills, general counsel to Sterling Drug Inc., will continue to practice law as a member of the firm.

He received his A.B. degree from Indiana University in 1922, and his LL.B. from Harvard Law School in 1925.

Winthrop-Stearns Names Henderson Vice President

Ralph W. Henderson has been named divisional vice president of the newly formed Winthrop-Stearns Inc., sub-

R. HENDERSON

sidiary of Sterling Drug Inc. He was formerly assistant to the president of Frederick Stearns & Company division, Detroit. He will head the plant at Myerstown, Pa.

Winthrop-Stearns was formed to integrate the major pharmaceutical interests of Sterling in this country.

Vaughan Elected Asst. V.P.

Thomas R. Vaughan has been elected assistant vice president of Freeport Sulphur Company. He is a native of Little Rock and a graduate of the School of Law of George Washington University, Washington, D. C. He joined the company in 1942 and became assistant secretary later the same year.

S. B. Penick Buys N. Y. Q.

S. B. Penick & Company, New York has completed arrangements to acquire the New York Quinine & Chemical Works, Inc., according to an announcement by S. B. Penick, Jr., president.

Established in 1885, the New York Quinine & Chemical Works has occupied throughout this period a major position in the medicinal chemical fields. Present plans call for a continuation of N.Y.Q. business along its established lines.

Correction

In the August issue of Drug & Cosmetic Industry we referred to the visit of Mr. A. Van Rooijen to this country and inadvertently reported the name of the company he is director of as the Van Rooijen & Co., Pty., Ltd., when it should have been Blok, Van Rooijen & Co., Pty., Ltd., Sydney, Australia.

Clay Dyar

Clay B. Dyar, Southeastern sales manager of Abbott Laboratories, died October 27 after a brief illness in St. Joseph's Hospital, Atlanta. He had

CLAY B. DYAR

been with the company for 35 years.

Mr. Dyar was born in Calhoun, Ga., in 1889. After graduating from Mercer University, and a pharmacy school he became a registered pharmacist. He operated his own store for a few years before coming to Abbott as a salesman in 1912. He was made district manager in 1928 and then manager of the Atlanta branch in 1934, and then to Southeastern divisional sales manager last year.

New Premo Plant

Premo Pharmaceutical Laboratories, Inc., has opened a new plant at South Hackensack, N. J.

Equipped with the latest scientific control devices, the new unit will produce penicillin, ampules and general pharmaceuticals. The chemical laboratories are headed by chief chemist Harold Rosenblum. The plant, staffed by approximately 250 employees, will be under the management of Harry Gimbel.

Slater Gets New Post

C. H. Slater of J. T. Baker Chemical Co., N. J., has been promoted from sales manager, fine chemicals division, to assistant general sales manager. Mr. Slater will continue to devote a major portion of his time to the management of the fine chemicals division.

Carl Angst Succeeded by K. F. Valentine

Carl N. Angst has resigned as president of Pitman-Moore Co. and has been succeeded by Kenneth F. Valentine, according to Dr. E. A. Cahill, president of Allied Laboratories, of which Pitman-Moore is a division. Mr. Angst started with the company in 1904 as assistant bookkeeper and served successively as credit manager, treasurer, secretary-treasurer, vice-president, and since 1935 as president. He will continue as director and treasurer of Allied Laboratories, and will serve Pitman-Moore as consultant and adviser.

Mr. Valentine, who succeeds Mr. Angst, was first employed by the company as a medical service representative in 1932 and was later advanced to the post of assistant sales manager which position he held until he entered the Army. In the Army Air Forces he served as an administrative officer, graduated from Command and General Staff School, and was released from active duty in the spring of 1945 with the rank of Major. Upon his return to the company he was appointed assistant to the president and in May, 1946 was named executive vice-president. In July, 1947 he was elected to the board of directors of Allied Laboratories.

Dealy Named VP of Republic Filters

Republic Filters, Inc., Newark, N. J., has appointed Francis X. Dealy as vice president in charge of sales. He was formerly secretary and sales manager of Ertel Engineering Corp.

Mr. Dealy was responsible for many of the newer developments in the filtration industry. Outstanding among these being the pyrogen and bacterial retentive filters and filter media which played a major part in advancing the field of parenteral therapy.

He will be in charge of sales and scientific development and will institute a program of customer relations thru the medium of trained sales technicians.

Canadian Agent for Fleuroma

Fleuroma, Inc., New York, announces the appointment of W. C. Burden as Canadian sales agent with offices at 760 St. Antonie St., Montreal.

Hermanny Celebrates 25 Years

Charles A. Hermanny, assistant plant manager of The Drug Products Company, Inc., has completed 25 years of continuous service with the company. At ceremonies for the event, the officers and directors of the company presented Mr. Hermanny with a gold wrist watch, and his fellow workers gave him a fountain pen.

John Sharp

John Edwin Sharp, 72, president of Aluminum Seal Company, died suddenly at Richmond, Ind., October 11, as a result of a heart attack.

JOHN E. SHARP

Born in Welland, Ontario, in 1875, Mr. Sharp received his early schooling in Niagara Falls, N. Y. Later he served in the Spanish American War. His career with Aluminum Seal Company began in 1915. The following year he was made plant superintendent and in 1926 he was transferred to the sales department. He was made vice president in 1930 and president in 1935.

Herbert Turrell

Herbert Turrell, cosmetics manufacturer and philanthropist, died at his home in West Orange, N. J., October 27, after a long illness. His age was 87.

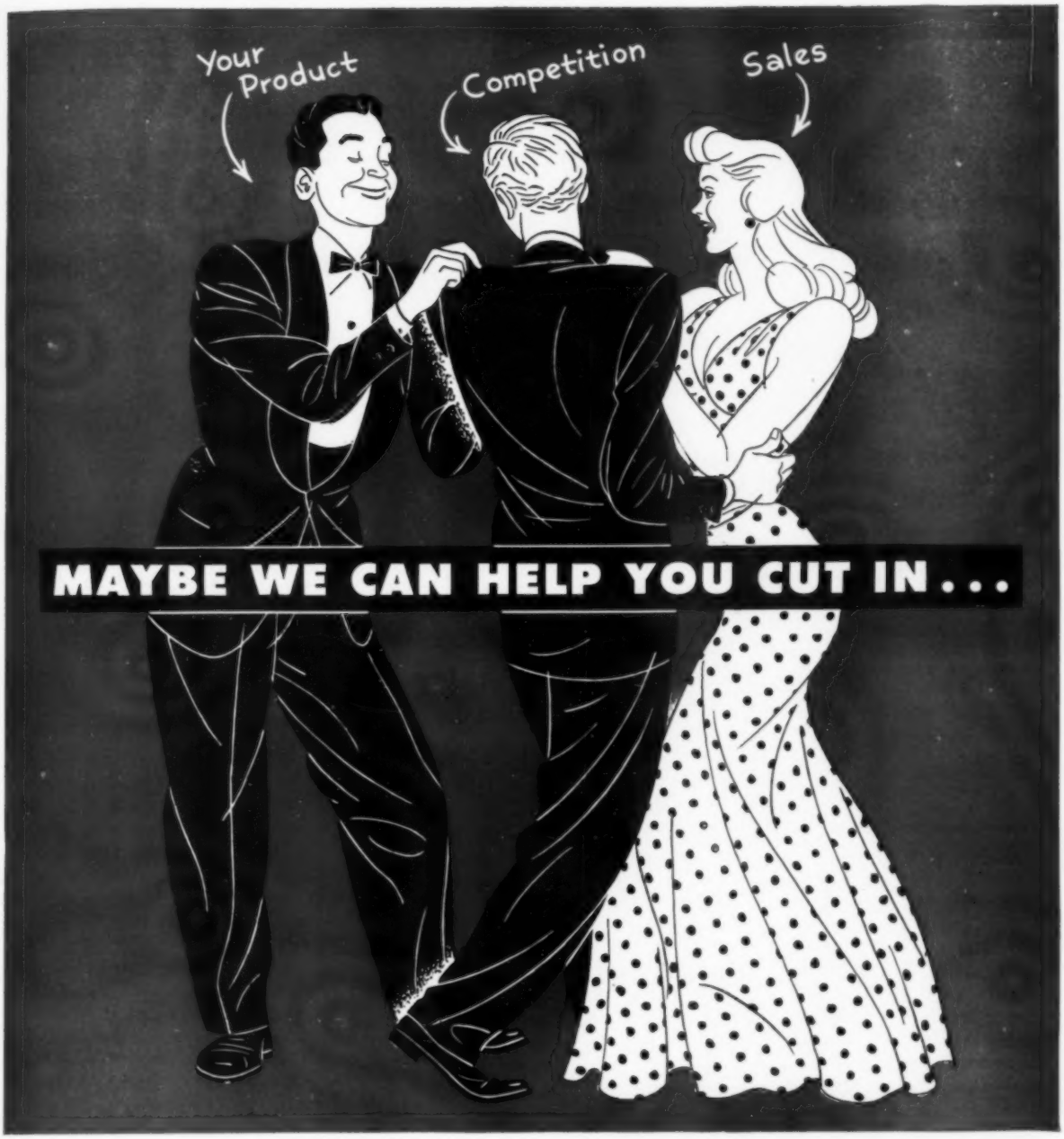
At the time of his death, Mr. Turrell was a director of the American Home Products Corporation. He was for 19 years in complete control of the Oxzyn Company until 1927, when it was acquired by American Home Products.

In 1935 he founded the Turrell Fund, comprising of several million dollars and the entire income was devoted to serving needy children.

Born in Newark, N. J., he graduated from high school in East Orange. In 1877 he became a messenger boy for Hall & Ruckel, wholesale druggists. He joined Reed & Carnick, and when that firm was sold to Parke, Davis & Co., he became traveling representative.

Mr. Turrell acquired considerable stock interests in Parke, Davis in 1890 and resigned from them in 1907. He took over control of Oxzyn Company in 1908. He was its manager and treasurer and one of the directors from then until 1927.

He married in 1883 Frances Robinson. She died in 1921. The next year he married Margaret Hobert, who survives.



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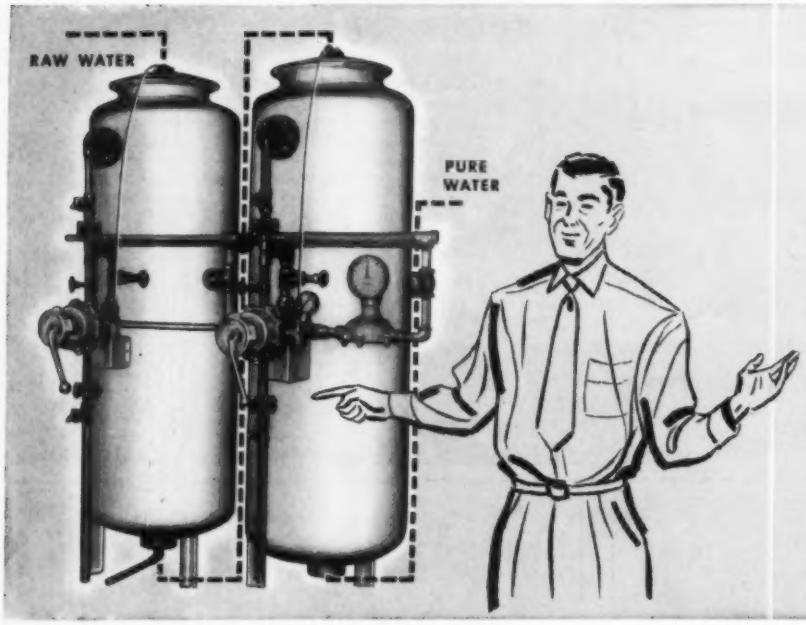

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Production Forum

By Francis Chilson

Industrial Consultant

Dwarfs, Midgets and Fritz Degener

Whenever a man has a secret passion from which the veil of secrecy is suddenly torn asunder it is only natural that he becomes super-sensitive and likely to quibble about details. You will recall that sometime ago I revealed to you that our genial friend, Fritz Degener, Chicago maestro of the Heyden Chemical Company has a secret passion for dwarfs. I was present when his wife accused him of it and I thought it would make interesting reading to bring you the facts.

Now with blood in his eye, Fritz accuses me of garbling the facts. He also called me a "coconut stealer" simply because I pulled a palm tree up by the roots and shook a few coconuts from it. Fritz insists vehemently he was not accused of being partial to dwarfs. It was midgets. Accordingly I stand reprimanded and corrected. I am obliged to confess however, I have never been able to distinguish between dwarfs and midgets and I will have to find out from Fritz how he does it. Since Fritz is a man of acute and sensitive discernment, undoubtedly he has developed a technique. The next time you meet a dwarf—or a midget—you might ask if he or she knows Fritz. If the little person says "No," then you must be talking to a dwarf. If, on the other hand the person questioned says "Yes," then obviously you are talking to a midget. It must be as simple as that. At the next meeting of the American Pharmaceutical Manufacturers Association, Mr. Degener will deliver an address entitled "The Differences Between Dwarfs and Midgets and How to Distinguish Them." Incidentally, I tried to illustrate this piece by means of a photograph of an affluent looking gentleman, unmistakenly like Fritz Degener, holding a dwarf or a midget on his knee. I was unable to obtain a copy of the photograph from the Press Association because they insisted that the gentleman in the picture was not Fritz Degener but J. P. Morgan.

I knew of course that Fritz and J. P. had a lot in common. Apparently both like dwarfs or midgets, and obviously both know how to make money. If I remember correctly, J. P. Morgan used to lend money to the late Queen Mary of Roumania, thereby making a tidy profit, while Fritz made money selling buttons from the Queen's nightshirt. It wouldn't surprise me if the nightshirt was bought with some of J. P.'s money. That's what you would call a round robin. J. P. lends the Queen money with which to buy a nightshirt and Fritz clips the buttons off the nightshirt to sell to make money. In view of their common interest in money making and their mutual partiality to dwarfs or midgets, it is a wonder to me that Fritz and J. P. didn't go into business together.

Inspiring Salesmen

I have attended a good many sales meetings all through the trade and I have seldom attended a really good one. I have often been bored to tears listening to the stereotyped patter so many sales managers slobber all over their men. I have felt deep sympathy for men who have been dragged, in some cases many hundreds of miles from their homes, to listen to the old worn-out shiboleths about the integrity of the company, the quality of the product, the necessity for working hard to achieve quotas, etc. I have often felt that sales managers sometimes try to persuade or inspire their men to do things which they themselves cannot do. Indeed, in some instances they try to inspire their men to do things which they themselves wouldn't do, even if they could. They'd be too lazy to make the effort.

Thus far I have never seen a sales manager get up and make a direct appeal to the constructive selfishness of his men. A long time ago Napoleon remarked that every private soldier carried a marshal's baton in his pack. It is certainly true in the drug and cosmetic industry that every salesman is potentially a sales manager, a general manager, or even a company president.

When one looks over the drug and cosmetic industry, it is strikingly apparent that with the exception of the

few who inherited their jobs, the men who are running the industry were, with very few exceptions, salesmen once. Here and there throughout the trade is a general manager or a president who was once a production man or a scientist, but generally speaking, the top management of the drug and cosmetic industry graduated from the sales ranks. Although I am not myself a salesman, I think this progression is logical and proper.

Why not use this fact to stimulate and inspire your salesmen? Why not continually stress what a marvelous opportunity the drug and cosmetic industry *as a whole* offers the dynamic salesman.

There is no reason why the careers of outstanding men in the industry, regardless of whether they are connected with your company, should not be used as examples of what a good salesman can do for *himself*. Since a sales manager's next step upward is into the general managership or the presidency of his company, he he should make clear that his own job is always open to any man in his group capable of filling it. He should also admit that even though he might not get promoted himself, his job is nevertheless open to the better man. (I know this is highly idealistic of course, but this is the way it should be.) Likewise, it should be admitted that if the company is not developing fast enough to provide opportunities for exceptional men, *they are free to go elsewhere*, with the help and blessing of the company.

The point should always be driven home to salesmen that they must do a good job for *themselves* in order to do a good job for their companies. This is what is meant by "enlightened self interest." Conversely, no salesman can do a really good job for himself unless he also does a good job for his company. Their records speak for themselves. It should always be emphasized, therefore, that every salesman should seek to establish an exceptional performance and cooperative record. If he does this, his reputation with his own company will be enhanced, and his reputation in the industry likewise will grow automatically. When a man's reputation in the industry grows, his value to his own company increases sharply. It becomes one of the jobs of the smart sales manager, therefore, to make sure by means of promotion, remuneration, increased responsibility, or some other device, that his good men are not snatched by alert competitive sales managers. But it is not his job to try to hold really good men by bluffing or meaningless promises.

Too many firms have the idea that the thing to do in building up a fighting sales force is keep it intact by by feeding the boys the old malarkey. I know one firm which continually emphasizes to its salesmen that it is "an honor" to work for the company. They give the boys a lot of honor, but not very much dough. This attitude is very rapidly changing, thank God, because good salesmen are scarce and too much in demand.

As a matter of historical fact, every company which did not provide opportunities for their really good men to reach their full stature, eventually lost them.

It is no good burying your head in the sand. If you have really good men, you have to provide opportunities for them to develop or you will lose them. If need be, it is better for such men to leave your company with the feeling that you did everything possible to help them realize their ambitions, than it is to allow them to depart with the feeling that they have been frustrated and cheated and that your company is a dead duck.

Resentful ex-salesmen make dangerous competitors.

Not every salesman is capable of becoming a sales manager, or even a district manager. Some salesmen are merely good work horses. They meet quotas because they are honest and sincere and work like hell. Such men will respond to an appeal to their personal ambitions because they never know, or won't admit they are not as good as the boss, or better. But fair and generous treatment and praise will keep the loyalty of such men. And titles often help.

A really great sales manager should be willing to step aside and give a better man his job. If he does this in all sincerity, he has demonstrated his own capacity for a general managership. If he doesn't do it, then he is demonstrating that he is impeding the best interests of the company and he should be supplanted. Unfortunately however, the sales manager has direct access to the right ear of the Big Boss. Hence, it may take the Mr. Big a long time to discover that his sales manager is a dead-head. Unfortunately, too, for a lot of salesmen, there are more sales managers who are dead-heads than live wires. It's Mr. Big's job to find that out. If his entire business could be lost in a year, he'd watch his sales manager like a hawk and he'd replace him promptly at the first sign of failure, just as a general does when a field commander loses a battle or a campaign. But unfortunately, an established business can coast for years on its own momentum even though the sales manager is not really competent, and Mr. Big just a nice guy. But the live wire salesman will size such a situation up in a hurry and will depart for greener pastures.

Contrariness

As a commentary on the contrariness of human nature the strike which took place in Guinness' brewery in Dublin just before I arrived there is highly interesting. There was a change in the top management of the brewery, which for many years has had very extensive social services for its employees. The new man was not at all pleased with the cafeteria facilities so he caused the cafeteria to be repainted and the bare wooden tables were covered with table cloths. Believe it or not, it was the table cloths that caused the strike! Through some queer process of reasoning, the workers figured that if the management could afford to put table cloths on the tables, the workers somehow were being made to pay for them. They also felt that if they wanted to eat at a bare table, it was their business and not the management's. The strike ended when the table cloths were removed. Undoubtedly, in the attitude of the workers there was a little element of Irish pride in that it em-

CHEMICAL EQUIVALENT OF DISTILLED WATER

AT *ONE-THOUSANDTH* OF THE COST!

"A *thousand* gallons of water from our FILT-R-STIL* Demineralizer cost us only as much as *one* gallon of distilled water," writes one important manufacturer. Another declares, "Our water costs have been cut 90%."

Those are just two typical reactions from users of FILT-R-STIL Demineralizers in all branches of industry. They happen to emphasize economy. But look at these other significant advantages:

FILT-R-STIL DEMINERALIZERS PRODUCE...

1. Water of uniformly high quality, even with a varying raw water supply.
2. Water stripped of its ionized solids content . . . completely or partially, as specified.
3. Water that is standardized and quality-controlled . . like any other raw material.

SIMPLE TO OPERATE...

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5. Ready for immediate operation . . . no long, preliminary "boil-out" required.
6. Suited for continuous or intermittent operation . . turned on and off like a faucet.
7. Automatic, precise, quality controls . . . indicating actual quality of all treated water.
8. Compact, self-contained, completely assembled . . . requires only connection to raw water source, drain, electrical outlet, and service.

* *Reg. U. S. Pat. Off.*

Cyanamid has just published a new, data-packed booklet giving all the details on FILT-R-STIL Demineralizing Units. If water is one of your raw materials, clip and mail the attached coupon today.

AMERICAN CYANAMID COMPANY

D.C.I. 6

American Cyanamid Company
Ion Exchange Products Dept. 10
30 Rockefeller Plaza, New York 20, N. Y.

Send me your new booklet on FILT-R-STIL Demineralizers.
Briefly, my water problem is of the following nature:

_____

_____

_____

Name _____

Company _____

Address _____

City _____ *State* _____

MILES NERVINE

AMPHOJEL BROMO SELTZER

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LYDIA E. PINKHAM RHINITIS

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America's "MEDICINE CHEST" favorites

are leading users of PNEUMATIC equipment, too!

HOUSEHOLD names, every one — and every one of these famed remedies is bottled, either completely or in part, by Pneumatic equipment.

From top executives of these companies, to the man responsible for machine maintenance, you'll hear the same enthusiastic endorsement: "Smoothest operating equipment we've got in the plant."

More soundly designed, and precision built to do their job, Pneumatic machines are a money saving, trouble saving investment. They're helping to earn dividends for leading producers of all types of bottled products through their time-proven "lower cost per container" performance. For cleaning, filling, capping and labeling you can depend on Pneumatic equipment—engineered, built and serviced by an organization with over 50 years of specialized experience.

PNEUMATIC SCALE CORPORATION, LTD., 70 Newport Ave., North Quincy 71, Mass. Branch Offices in New York, N. Y.; San Francisco, Cal.; Chicago, Ill.; Los Angeles, Cal.

The completely automatic bottling installation shown here in operation at Miles Laboratories plant in Elkhart, Indiana, includes a Pneumatic Inverted Air Cleaner, Automatic Samco Vacuum Filler, Two Head Rotary Capper and Simplex Labeler.

PNEUMATIC **PACKAGING AND BOTTLING MACHINERY**

Over ninety different machines for the packaging of dry, free-flowing products and the cleaning, filling, capping and labeling of containers for liquids and semi-liquids

barrasses a worker in dirty overalls to sit at a table covered with a clean cloth.

This is, of course, another example of management's frequent failure to keep workers fully informed of their activities; to explain in advance why things are done.

In my own experience in this country I have heard factory workers say after a cafeteria had been repainted and brightened up, that the management would do better to give them the money instead of spending it on paint and fancy fixings. They often get the notion that such fixings cost a fortune and that the management is doing this in order to avoid paying higher wages. If workers were told in advance why changes affecting them personally are made and were told moreover how little such changes actually cost, much grumbling could be avoided.

Personnel Amenities

It is interesting to reflect on the difference between European and American manufacturers in respect to their attitude toward personnel services, or as the Europeans call them, Personnel Amenities. In Europe I found even very small plants having only a couple dozen employees equipped with kitchens and cafeterias, and what was interesting, everyone of them had a kitchen garden as well. I asked one manufacturer how he could grow a kitchen garden and pay factory labor rates for the work involved. He said he realized that the green stuff could be bought cheaper in the market—if it were available, but that since supplies in the market were variable and not always extensive it was felt to be a good investment to grow at least a major portion of the vegetables consumed in the cafeterias. I noticed that these gardens were producing not only a great variety of green vegetables, but a lot of roots as well, such as potatoes, carrots, beets and parsnips.

Almost all personnel services in Europe are set up to provide complete medical care for the employee and to extend this medical care to the families of married employees. In one instance, the layout of the personnel service area was arranged so as to provide access for the families of employees without forcing them to use the factory entrance.

The following information is supplied by manufacturers of the equipment described and claims made below by these manufacturers are passed along for what they are worth. Presentation of such notice in this department is not to be taken as endorsement of the claims or of the equipment.

Economical Duct Insulation

Everyone recognizes that proper duct insulation cuts fuel and energy costs, prevents heat from radiating into or being absorber from work areas, and makes possible greater control over heating and cooling systems.

But not everyone recognizes the great importance of following proper and tested installation techniques such as developed and recommended in a bulletin put out by the Industrial Mineral Wool Institute, 441 Lexington Ave., New York.

The three general duct usages which require insulation are, carrying hot gases, carrying air for room heating and air conditioning, and carrying cool gases. Insulation of ducts used in ordinary room heating is primarily valuable in preventing heat from being dissipated before reaching its destination. When cool air or gases are carried in insulated ducts, the additional annoyance of deteriorating condensation sweating is prevented. Operating expense, of course, is a factor in every case.

For inside installations, where the temperature gradiant is not great, the following procedure is recommended. Clean the duct of all grease and dirt. Cut mineral wool blocks to conform to the area to be insulated. Wire the blocks to the ducts. Galvanized or expanded metal angles are recommended to keep the blocks in line at the corners.

Where the temperature gradiant is greater than that encountered in room heating and air conditioning additional steps are advised. They are: Trowel a half inch coating of mineral wool insulating cement over the surface of the blocks. Follow this with a layer of one inch mesh poultry netting. Apply a quarter inch coating of finishing cement.

In cases where the contents of the duct are at a lower temperature than the surroundings, an asphalt or other type of vapor barrier must be applied to the insulation exterior. The purpose of the vapor barrier is to prevent atmospheric moisture from permeating the mineral wool and condensing therein, spoiling its insulation qualities.

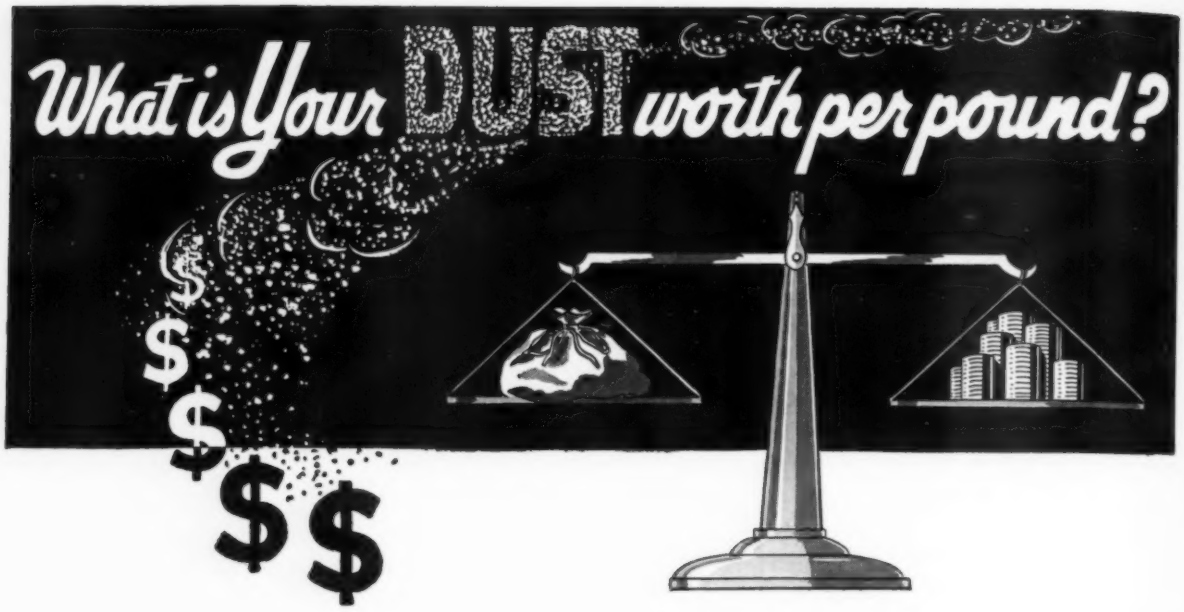
Asphalt is also useful in cementing the mineral wool blocks to the duct before wiring them in place, and for preventing corrosion.

New Carton Board

Robert Gair Company, Inc., New York, announces that its new product "Gaircote" is in production at Gair Cartons Division, Piermont, New York. Gaircote is the designation for a new special coated board for the manufacture of folding cartons. Gaircote bridges by precision control and manufacture the gap between White Patent Coated and the high grade but slow speed brush coated boards. With the incorporation of special equipment in the board machines and new methods of stock preparation, this coated sheet is superior to White Patent Coated and in many cases to the highly expensive brush coated boards.

The raw stock for Gaircote is a Super White Patent Coated Sheet with a smoothness and finish exceeding the patent coated. On this smooth sheet is applied by modern coating methods a coating of white pigments and flexible adhesives, which provide a bright white receptive pigment printing surface with controlled ink penetration to meet all printing demands for gloss and snap in the final product. Colored pigments may also be employed where tonnage requirements permit.

Completely new methods of stock treatment and coaters built right into the production machinery re-



INDUSTRY PAYS an incalculable bill each year for its inability to garner all its dust. What is your individual share of that tab? How much money, in the form of real pay dust, are you blowing away? Does your present dust-collection system approach 100 per cent recovery? Even if it is as high as 99.5 per cent, what does the remaining 0.5 per cent mean in loss to you? Only 100 lb. a day means approximately 15 tons a year.

You alone can provide the answers.

The MIKRO-COLLECTOR
will be on display at the
Exposition of Chemical Industries,
Grand Central Palace, New York City
Dec. 1-6
Booth 300-302 Mezzanine Floor

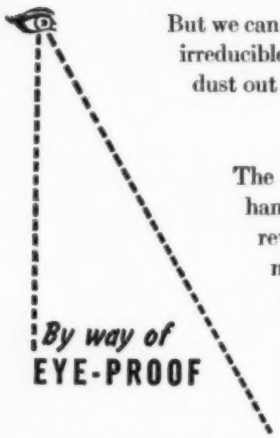
But we can offer a suggestion as to how to reduce your losses to the irreducible minimum: The **MIKRO-COLLECTOR** will keep your dust out of the air and your

Profits in the Bag.

The **MIKRO-COLLECTOR** with its phenomenal ability to handle even those damp and hitherto baffling dust loads . . . its revolutionary principles, which assure a perpetually clean filter, marking the first radical change in the art of dust-collection in a quarter century . . . supplements our line of MIKRO-PULVERIZERS and MIKRO-ATOMIZERS in use throughout the world. But it performs with equal efficiency as an auxiliary to any type of grinding machinery, or in general air-clarification.

The value of the **MIKRO-COLLECTOR** in dollar-and-cents . . . its ability to amortize its cost quickly . . . lies in its 99.99 per cent minimum recovery of most solids even in the low micron ranges.

When you want COMPLETE recovery . . . whether of dry dust or dust containing a considerable percentage of water or oil. . . . it will pay you to investigate the performance of this equipment. Write for your copy of the **MIKRO-COLLECTOR** Bulletin.



1—A freshly laundered white handkerchief, held over the exhaust during the filtration of finely ground colored pigment, shows no discoloration.
2—After days of such operation, the outer surface of the cylindrical, felt filter bag remains as clean as when first installed.

PULVERIZING MACHINERY COMPANY
22 Chatham Rd., Summit, N. J.

1325

sults in a new product whose higher cost is more than offset by superior printing characteristics. Its use results in ink economies and smoother press operation, plus more brilliant and exact reproductions which otherwise could not be achieved by printing on anything but a smooth pigment surface.

Incorporation of the modern coating methods in the line of direct production produce a sheet more uniform from order to order than is possible by brush coating methods. As there is no delay in coating, and since the new Gaircote is a continuous process, the full weight of precision control and manufacturing methods combine to produce a board product that stands as a new and more useful tool for the printer, packager and advertiser.

Humidity Control

An eight page booklet on humidity control in air conditioning for industrial processing has been issued by Surface Combustion Corporation, Toledo 1, Ohio, explaining the principle of operation and details of application of the Kathabar system of selective humidity control.

In the booklet are shown various methods commonly used in dehumidification, compared with the direct-cycle of selective dehumidification-humidification provided by the Kathabar system. The flexibility of the operation is illustrated by a chart giving the various temperature-humidity conditions available from the system, as it might be applied to one large processing plant requiring different humidity conditions for processing, packaging, storing, personal comfort, etc. The booklet is illustrated with numerous installations, including those for processing chemicals and drugs, capsulating, food dehydrating, film and sensitized paper, packaging and storage of highly finished steel parts, paper testing and research laboratories. Booklet is available to anyone requesting it on company letterhead.

Mikro-Collector

Pulverizing Machinery Co., on the threshold of its twenty-fifth anniversary, has announced its invasion of the dust collection field, with the production of a Mikro-Collector.

This new member of the Mikro family embodies several new features destined to revolutionize the art of dust collecting, according to its manufacturers. In their opinion its ability to eliminate atmosphere contamination marks a big step toward the goal of completely dustless industry.

The Mikro-Collector is said to have the first commercial application of hard pressed wool felt as a filter medium in industrial air and gas filtration. Felt has long been recognized for its potentialities in this respect, because of its durability and the minute pores capable of retaining the finest particles. But, for some time these virtues nullified each other. Its pores were so small in relation to its thickness that they clogged up. In the Mikro-Collector this problem has been solved by the use of a hollow, annular ring which hugs and flexes the cylindrical felt bag while moving up and down its outer surface.

Around the inner periphery of the blow ring is a narrow slit through which is directed a jet of air supplied by a positive pressure blower. This countercurrent of air is conveyed to the blow ring by a flexible hose and assures a perpetually clean bag. And also during the filter operations no portion of the filter surface need be cut off for cleaning or shaking.

The dust laden-air, admitted through an opening in the roof of the cabinet, is caught in the radically directed air stream and swept against the inner surface of the bag. The filtered, air may be recirculated without pollution and without loss of conditioned air.

The manufacturers claim loss is so infinitesimal that recovery is virtually 100 per cent. Another claim is its ability to handle dusts containing a high percentage of moisture or oil. For fuller information write Pulverizing Machinery Co., 141 Chatham Road, Summit, N. J.

Label Coding Machine

You will be glad to know that F. L. Smithe Machine Company, 645 West 44th Street, New York City, is again producing the Champion Label Coding Machine. Unquestionably this is the fastest and most adjustable label coding machine on the market. Registry is perfect and uniform even on the smallest ampoule labels.

The printing is clear and clean because a metal numbering head is used with printer's ink. The machine can readily be placed on a bench and occupies a space of

24" x 63". It is 25" high. It is completely adjustable, having a range in size from ⅞" x 1" up to 8½" x 11". Labels can be coded or imprinted at speeds ranging from 150 to 200 per minute. Changeovers from one size to another can be made in approximately five minutes' time. The numbering head is adjustable and does not have to be removed from the machine for different code numbers.

We believe this machine to be the fastest label coding device ever developed. The numbers can be placed in the margins, at the top or bottom or sides of the labels. Registry is close because the label is held positively on the imprinting drum by means of grippers. This feature is particularly important in the running of very small labels at high speeds. The operating cycle of the machine is as follows: A large stack of labels is placed into a magazine, the labels being stacked on edge. A vacuum selector pulls the edge of the first label out from the stack about ⅛", allowing a separator shoe to slide down behind it. Simultaneously, a pair of grippers clamp the label firmly. The imprinting drum, holding the firmly clamped label, rotates under the imprinting head to receive the code number and the label is then discharged onto a slowly moving belt on the delivery table. All mechanical motions are very simple rotary elements. The machine is so simply designed that an unskilled female operator may run the machine and make all necessary adjustments.

A counting device can be obtained with the machine for a small additional sum and for a slightly larger sum, an automatic shut-off device, which can be set to run a certain number of labels and automatically cease operation when that number has been run off.

Exclusive agent for this machine is my good friend, Ed Baum, 225 Broadway, New York 7, N. Y.

Laboratory Lectrodryer

The Pittsburgh Lectrodryer Corp., is offering a laboratory Lectrodryer, a compact aluminum, portable unit capable of drying flows of gas and air up to approximately 100 cubic feet per hour and will adsorb about 5,500 grains of moisture before reactivation is necessary.

The unit is suitable for varied applications, such as drying compressed air for spray guns, drying refrigeration coils before installation, and it is widely used to supple dry air for testing the results of moisture in air on various processes and products.

Dewpoints as low as minus 60 degrees centigrade and lower are readily obtained. According to the firm's engineers, it has dried gases to dewpoints well below minus 76 degrees.

To reactivate the Lectrodryer after it has adsorbed its capacity of moisture, it is merely necessary to plug a cord into a light socket for two or three hours. During reactivation a small quantity of air is passed through the dryer and carries off the released moisture. Although it operates on pressures as low as two inches of water, it is built as standard for operation on pressures up to 15 pounds per square inch.

Lightweight Foot Pump

A new lightweight hydraulic foot pump is being introduced by the Lyon-Raymond Corporation, that offers features in size, operation and design. The pump is small and compact, being designed so that the pedal return spring is built inside the body and the release controlled by slightly raising the single pump pedal. The total weight is 13¼ pounds.

The flat base has bolt holes for easy mounting. Special features include a built-in oil strainer, an adjustable relief valve and a chrome plated piston for long-life operation. Additional information may be obtained from Lyon Raymond Corp., Madison St., Greene, N. Y.

Corrosion Resistant Booklet

A new booklet released by the U. S. Stoneware Company, Akron, Ohio, called bulletin K might be of interest to the company selecting the proper or suitable corrosion-resistant materials or equipment for problems confronting its chemical engineers. Bulletin K was prepared with a view toward helping those interested in such materials to determine the range of products manufactured by U. S. Stoneware, and how they are used to combat corrosion. The bulletin is free, on request.

Minimix

Intended for laboratory use, or small batch production the "Minimix" has been put on the market by Mixers, Inc., East Allen St., Philadelphia, Pa.

It is horizontal in design, 34 inches long, 13 inches wide and 18 inches high, and has a capacity of approximately four gallons per batch.

The internal mechanism consists of a product reduction chamber. In this chamber are housed a series of four mixing and kneading arms which smooth out all unevenness of the product, and two scraper arms which are inclined at an angle and so spaced that they prevent the product from adhering to the chamber walls and keep it in circulation.

The driving mechanism is housed in an enclosed chamber and separated from the main body of the mixer by a well which prevents grease or oil reaching the mixing chamber or the product getting into the gears. In the body of the mixer are two feed screws traveling in opposite directions and separated by a central partition. The product is dumped into the body of the mixer and one screw feed takes it into the paddle compartment where it is kneaded. When the cycle of up one side and down the other has been completed the product is again fed into the paddle compartment, and repeated until the product reaches the desired result. When the product is ready to be discharged, this is done by opening the trap door while the mechanism is in motion, making it self-emptying.

The mixer works equally well on dry products or those of the consistency of putty. It is made of stainless steel and can be supplied either plain or jacketed for accurate temperature control.

KIMBLE'S *New* TUF-TOP *Neutraglas* AMPULS

FEATURES

- ✓ NO CHIPS
- Handier Sealing
- Easy Entry of Needle
- Steady Racking

KIMBLE GLASS

The Visible Guarantee of Invisible Quality

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DIVISION OF OWENS-ILLINOIS GLASS COMPANY

Looking for Added Profitable Sales Outlets?

use BROWN BAG PACKETING!

Package your product, if it's in dry free-flowing form, in sales appealing, Brown Bag open-end packets. Whether your product is powdered, granular, or crystalline, Brown Bag Filling Machines and packets spell success to any sales expansion program. Scores of drug and cosmetic manufacturers have turned small, packeted, individual portions of their product into large sales volume — literally ounce by ounce. Brown Bag Filling Machines, in two models, with capacities up to 3½ ounces, operate efficiently and automatically at a rate of from 40 to 60 discharges per minute, depending upon the dry type of your product. SEND US A SMALL AMOUNT OF YOUR PRODUCT FOR PACKETING with your order. Brown Bag experts will gladly send you recommendations that best apply to your product.

PACKETING NOW???

Brown Bag has complete facilities to fill your packet requirements exactly to your specifications. Modern and efficient envelope-making machinery, high-speed presses and long packeting assure prompt delivery of your envelopes.

BROWN BAG FILLING MACHINE CO., INC.
FITCHBURG, MASSACHUSETTS
West Coast Reps., Peter D. Bowley & Assoc., 369 Fifth St., San Francisco, Cal.
MANUFACTURERS OF OPEN END ENVELOPES, PACKETS AND PACKAGING MACHINERY

AUXILIARY EQUIPMENT FOR PHARMACEUTICAL MANUFACTURE

For 50 years Stokes has designed and built tablet machines and complete auxiliary equipment for leading pharmaceutical manufacturers all over the world. We are, therefore, aware of the importance of inter-machine teamwork in producing highest quality products at low cost.

This experience enables us to offer you equipment that is simple in design, rugged in construction . . . outstanding in operating efficiency and economy . . . readily mastered by semi-skilled help . . . equipment that meets every requirement for modern pharmaceutical manufacture.

We suggest you investigate Stokes equipment, and we invite you to make use of our confidential consulting and laboratory services in the preparation of special formulae and materials for tabletting.

For complete information on tablet machines and pharmaceutical auxiliaries, write. . . .

STOKES PHARMACEUTICAL EQUIPMENT INCLUDES: *Tablet machines for production from 100 to 1500 tablets per minute, mixers, granulators, drying closets, sifters, drug mills, coating pans, tube filling and closing equipment, water stills, vacuum drying and extracting equipment, etc.*

F. J. STOKES MACHINE CO.
5932 Tabor Road, Philadelphia 20, Pa.
Representatives in principal cities throughout the world

F.J.Stokes PHARMACEUTICAL EQUIPMENT FJS Est. 1895

Powdered Materials PACKED TIGHTER

WITH THE TRIANGLE MODEL U-1 AUGER PACKER

If your powdered materials are packed loosely they'll settle after handling . . . and there's no sales appeal in a package that doesn't appear full! The answer is the Triangle Model U-1 Auger Packer:

1. It packs uniformly and tightly, enabling you to use a smaller, less expensive container.
2. Gives greater consumer acceptance to your product because it's a fully packed package.

Simple . . . easy to operate . . . accurate . . . labor saving . . . this machine now available for "*immediate delivery.*" Take the first step to better packaging by writing today for a bulletin which gives complete details.

- √ Fills and packs automatically after container is placed in position.
- √ 20 to 30 per min. in cans, bags, cartons, jars and envelopes.
- √ 1 oz. to 5 lbs. filled with extreme accuracy.
- √ Reduces operator fatigue while increasing production. (No foot pedals.)
- √ Easy to clean.
- √ Quick change-over to different products.

TRIANGLE PACKAGE MACHINERY CO.
929 N. SPAULDING AVENUE, CHICAGO 51, ILL.

Here's what you'll like about the new

...**"HAGERTY HANDY FILLER"**

- Durable
- Moderately priced
- Eliminates spilling
- Simple to operate
- Convenient sizes
- Light construction

The most practical hand filler for creams, lotions and liquids.

Write for illustrated folder and prices

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10 Platt Street New York, N. Y.
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NEW EQUIPMENT

for Immediate Delivery

VACUUM FILLERS—8-10-12 SPOUTS
WILL FILL FROM 1 OUNCE TO 1 GALLON JARS OR BOTTLES — 45 to 60 PER MINUTE
STAINLESS STEEL SYPHON FILLERS
CHEM & PRO SLOW and HI-SPEED AGITATORS
CHEM & PRO POWDER MIXERS—up to 2000 lbs.
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CONVEYORS BUILT TO YOUR SPECIFICATIONS

Guaranteed Rebuilt Equipment

3—Mikro pulverizers—bantam size.
1—Mikro pulverizer—10 HP motor.
3—Day Lightnin fillers—Stokes Model G Filler.
1—Devine 20 shelf vacuum dryer—40" x 43" complete.
5—Stokes, Colton, Kux Lohner from ½" to 3½" tablet presses.
1—Ayres tablet counting machine—up to 1000.
10—Stainless steel clad kettles—30 to 100 gallon.
1—Perfectum ampule fillers from 1 to 10 CC and also a Perfectum sealer.
12—World, Ermold semi-automatic labelers.

Write for our latest bulletin containing over 500 items.

Chemical & Process Machinery Corp.
146 GRAND ST. WOrth 4-8130 NEW YORK 13, N. Y.

4 ROSS AUTOMATIC CARTONING MACHINES

SAVE $1000 PER MONTH

Can you afford to overlook the assured savings that the Ross way of mechanized cartoning provides? For Ross machines save in two ways: first, through trouble-free operation at high production rates; second, by their ease of adjustment. A change from one size carton to another can be made in a few minutes without substituting interchangeable parts. It's done by setting dial controlled units that are permanently affixed to the machine bed.

Ross cartoning machines operate quietly. They need no lubrication except for the motor. And there is no reciprocating movement or stop-and-go motions to cause wear. Learn all about this new and better way to carton everything from pill bottles to spark plugs. Use the coupon.

Demonstrating a standard Ross automatic cartoning machine at the 1947 Packaging Exposition prior to delivery to Sharp & Dohme.

A. H. ROSS COMPANY, Inc.
PACKAGING MACHINERY
Subsidiary of Rockwell Manufacturing Company
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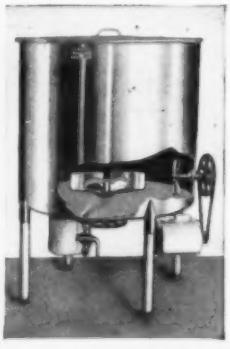

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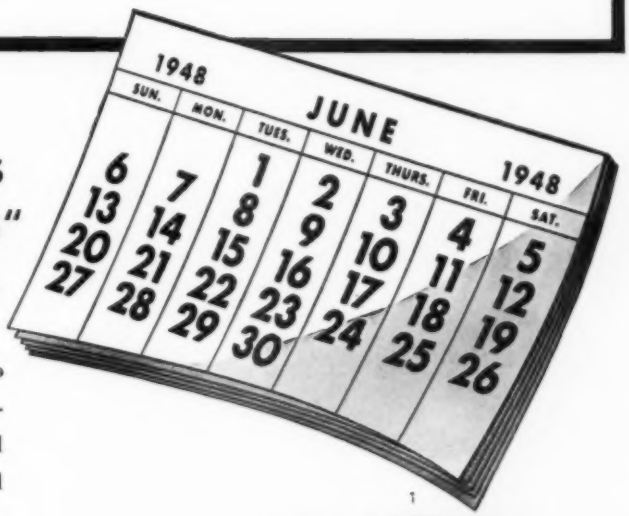

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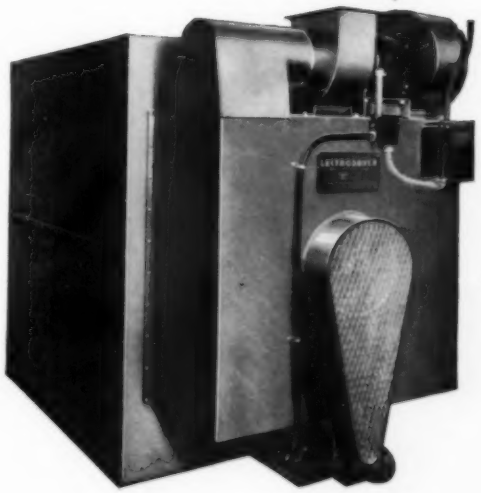

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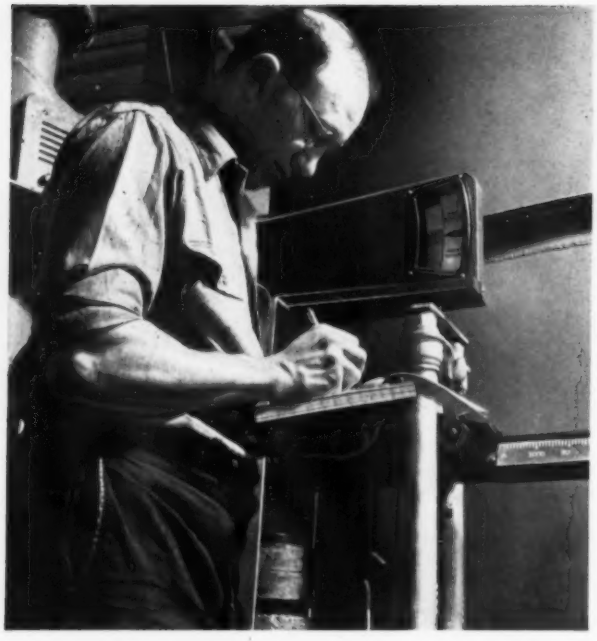

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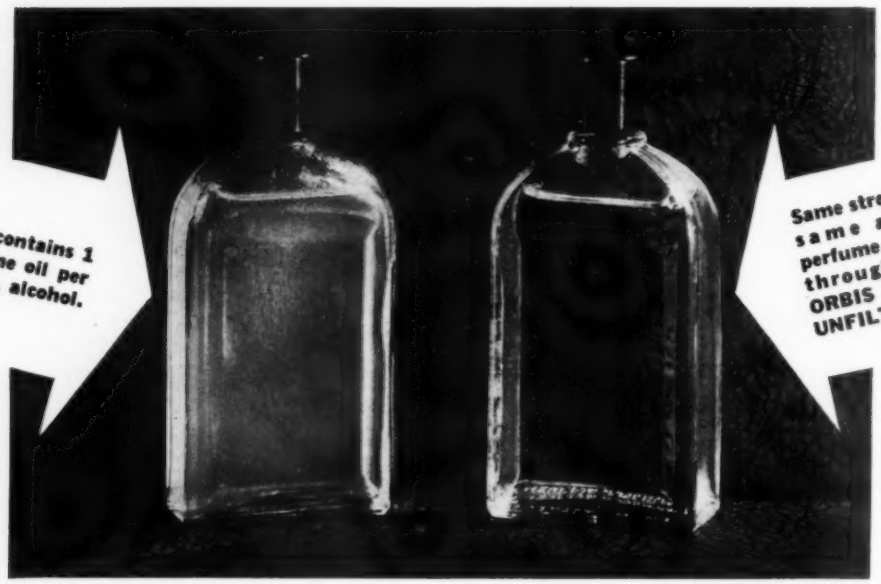
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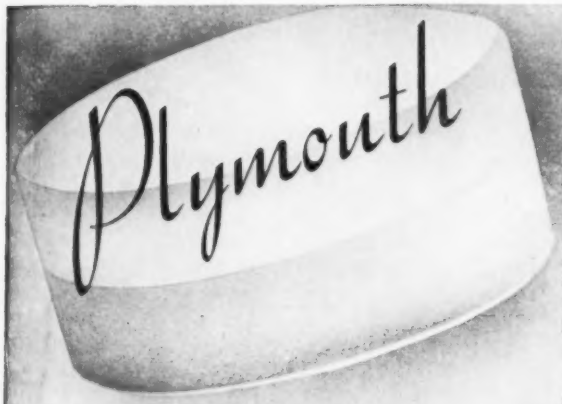

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YOUR TRADE-MARK RECORD

By JOHN H. GRAHAM
International Trade-Mark Consultant

Feather Touch (Charles of The Ritz) Versus Feather-Weight (Arden)

IN APRIL of this year the U. S. Court of Customs and Patent Appeals handed down a decision confirming the findings of the Patent Office in the above matter. This resulted in cancellation of the trade-mark Feather Touch owned by Charles of the Ritz, Inc. The goods were toilet creams in each instance and thus of the same descriptive properties, as admitted by both parties. The facts are as follows:

Charles of the Ritz, Inc. filed their application on June 10, 1942 claiming use since June 5, 1942, and the mark was registered on September 29, 1942, the mark being Feather Touch. Elizabeth Arden Sales Corporation filed application for Ardena Feather-Light Foundation Cream on May 13, 1941, claiming use since February 28, 1940, and this was registered on December 22, 1942, after disclaiming the words "Light" and "Foundation Cream."

Despite the fact that the two marks were concurrently applications in the Patent Office they were not thrown into Interference Proceedings but, as you will see, the earlier filed and used mark issued after the later used and filed mark.

Also, no opposition was entered. In due course Arden sued for cancellation, was upheld by the Examiner of Interferences, was thereafter sustained by the Commissioner of Patents and, in the appeal to the Court here discussed, was sustained by the Court.

From this decision several things come forth: (1) Failure to file notice of opposition in no way affects the right of a party to file suit for cancellation after the opposition period has gone by. (2) "Feather-Light" with "light" disclaimed was held highly *suggestive* but not descriptive of the goods, i.e., foundation cream. (3) The first person to file application with a first use earlier than another applicant's use makes the registration of the first person *prima facie* proof of his ownership. (4) "Feather Touch" also was highly suggestive of the Charles of the Ritz cream but was not descriptive. (5) Considering the trade-marks of the parties as a whole (i.e., Feather Touch versus Ardena Feather-Light Foundation Cream) the two marks were so similar as to be likely to cause confusion of origin in the public mind and thus deceive purchasers. (6) That even disclaiming "Light" in the notation Feather-Light does not vitally affect the trade-mark significance of the *whole notation* Feather-Light.

From the above you will find answers to several questions which must have come up in your mind on matters of trade-mark conflicts. This is a remarkably interesting decision from my point of view as an analyst since each of the six points emphasizes an important factor of trade-mark practice.

From The Mail Box

I have been asked the following question so many times that it must be puzzling quite a few of you.

Question: Can I renew my 1905 Registration under the old Act? Or do I have to renew under the Lanham Act? I am not using the mark actively.

Answer: I have heard differing opinions to my own but it seems fairly positive that any trade-mark renewed *must* be renewed under all terms and conditions of the Act of 1946 (The Lanham Act).

The Act itself says (sec. 46 b): "Registrations now existing under the Act of March 3, 1881, or the Act of February 20, 1905, shall continue in full force and effect for the unexpired terms thereof and *may* be renewed under the provisions of Section 9 of this Act." (Italics are mine).

The use of the word "*may*" is unfortunate since it indicates "if you wish," but the Act of 1946 repeals all other Acts which are inconsistent with it.

Certainly the new fee of $25 must be paid on renewal and the form of renewal includes a statement that "the mark described . . . is still in use in commerce . . ." so that any question regarding use is answered hereby. Coming now to the Rules, these go even further. Rule 35.1., regarding renewal, says: "Registrations under the Acts of 1905 and 1881 remain in force for their unexpired terms and *may only* be renewed in the same manner as registrations under the Act of 1946." (Italics my own).

In view of these and of the obvious portent of the Act that all matters should be brought up to a modern scale of operation, I feel that there is no doubt that renewal must be made under all terms and conditions of the Lanham Act The requirement of an affidavit of use five years *after* such renewal will exist in my opinion, subject to cancellation of the mark if the affidavit is not filed.

After all, the five-year period of life was chosen because so many trade-marks are completely abandoned in the first five years of life. It they go beyond that period in actual use, they stand a

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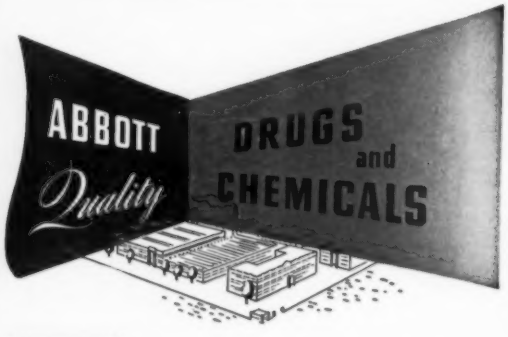

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good chance of lasting according to statistics. The object of the affidavit is to get off the record such marks as are abandoned to clear the way for others who might wish to use the same or similar marks in good faith.

Why should the owner of a 1905 Registration who is *not* using the mark and does not intend to do so have the privilege of renewal under the *old* Act and, therefore, continue to obstruct others when those who file under the new (1946) Act are not so fortunate?

Accordingly, I am sure that the Act of 1946 meant to clearly state that renewal of a 1905 or 1881 trade-mark MUST be under the conditions and terms of the Act of 1946.

Fifth Avenue Refused As A Trade-Mark in Switzerland

Up to the present time, I have confined my detailed comments on trade-mark decisions to those in this country. A recent decision in Switzerland, however, needs more than a passing glance. A Belgian chemist registered a trade-mark "*5th Avenue*" for perfumes and cosmetics with the International Trade-Mark Bureau at Bern, Switzerland. I may mention that such international registrations are of limited use nowadays since most of the principal countries are not members. They either did not ratify the agreement setting up this international clearing house for trade-marks or they dropped out after signing.

In the particular case the Swiss Patent Office informed the International Bureau that the said mark could not be protected in Switzerland since "5th Avenue" was the name of a well known street in New York and thus it was geographic and an indication of place of origin. The chemist petitioned the Swiss Court, arguing that there were many "5th Avenues" in American cities and, therefore, the notation did not signify origin. His petition was denied, however, it being held, amongst other things, that the mark was misdescriptive since the owner did not, in fact, have any connection with Fifth Avenue, New York City. In Switzerland a mark which contains an element which rightly belongs to the public cannot be registered, and an indication of origin, such as "5th Avenue," is the common property of all producers unless the place is the private property of the trade-mark owner.

You will readily see that this decision is very parallel to our own decisions.

Foreign Briefnotes

Argentina

Those of you who have had any patent or trade-mark dealings in the Argentine Republic will know of the usual arbitrary attitude of the officials. According to my associates' report, this is being changed by the newly appointed Commissioner of Patents, who has decreed that a more liberal view of invention, etc. must be adopted by his examiners, and when in doubt, the benefit should be in the applicant's favor.

As an example of this more liberal view the following is offered:

Patents granted in June 1945.....	40
Patents granted in June 1946.....	100
Patents granted in June 1947.....	360
Trade-marks granted in June 1945.	425
Trade-marks granted in June 1946.	850
Trade-marks granted in June 1947.	1,550

The Boykin Bill

To keep you up to date in case you have any patent matter you still want to file abroad, but which has been published, the following countries have endorsed our Boykin Bill (which expires February 29, 1948) and you can still file cases or perform other acts up to the dates given:

Belgium—probably Feb. 29, 1948
Canada—Nov. 15, 1947
Finland—Feb. 29, 1948
France—Feb. 29, 1948
Great Britain—Feb. 29, 1948
Holland—Dec. 31, 1947
Italy—Feb. 29, 1948
Luxemborg—probably Feb. 29, 1948
New Zealand—Feb. 29, 1948
Norway—Dec. 31, 1947
Sweden—Feb. 29, 1948
Switzerland—Dec. 31, 1947

The Trade-Marks listed here are dated August 19, 1947 through September 16, 1947 inclusive.

DAGGER—VI—BCH—512,241
Consolidated Cosmetics, Chicago, Ill.
Ser. Nov. 8, 1946 D. U. Oct. 25, 1946

DALYDE—VI—T—518,532
Hynson, Westcott & Dunning, Inc., Baltimore, Md.
Ser. Mar. 5, 1947 D. U. Jan. 9, 1947

DARB—IV—A—514,532
Robert E. Hanson (Darb Products Co.), Fort Dodge, Iowa
Ser. Dec. 19, 1946 D. U. Apr. 26, 1945

DAYLEN—IV—A—512,842
Amedeo Leone (Daylen Co.), Springfield, Mass.
Ser. Nov. 19, 1946 D. U. Oct. 4, 1946

DEAN OF HAIR—VI—H—519,127 (and des.)
Dene Harmon (Den's Products), Santa Monica, Calif.
Ser. Mar. 17, 1947 D. U. Dec. 24, 1946

"DE LESCINSKIS"—VI—BC—524,470
Leonid De Lescinskis, New York, N. Y.
Ser. June 19, 1947 D. U. May 1, 1946
Reg. 432,344 Aug. 26, 1947

D E L—VI—ST—520,060
Alexander E. Sewell (Norwood Labs.), Park Ridge, Ill.
Ser. Apr. 2, 1947 D. U. Mar. 12, 1947

DEPTH—VI—C—516,249
Blecano Company, Jersey City, N. J.
Ser. Jan. 24, 1947 D. U. Jan. 16, 1947

DERMENE—VI—H—525,520
Angelo Amenta, (A. Amenta & Co.), Paterson, N. J.
Ser. July 2, 1947 D. U. June 10, 1947

DESNY—VI—B—519,319
Desny, S. A. R. L., Paris, France
Ser. Mar. 20, 1947 D. U. July 29, 1946

DESORMAIS—VI—BC—511,756
Parfums Verchere (Parfums Jerome), S. A. R. L., Paris, Fr.
Ser. Oct. 30, 1946 D. U. Mar. 20, 1945

DREAM FACE—VI—C—518,775
Park & Tilford, New York, N. Y.
Ser. Mar. 10, 1947 D. U. Feb. 27, 1947

DREAM PUFF—VI—C—516,353
Farel Destin, Inc., New York, N. Y.
Ser. Jan. 25, 1947 D. U. Jan. 10, 1947

DREAM WORLD—VI—B—510,598
BY JULIANA
Juliana Underwear Co., New York, N. Y.
Ser. Oct. 10, 1946 D. U. October 1944

DRESS REHEARSAL—VI—H—514, 609
OF HOLLYWOOD (and des.)
Alvin R. Katz (All-American Labs.), Los Angeles, Calif.
Ser. Dec. 20, 1946 D. U. Nov. 22, 1946

DUNX—IV—M—509,257
K. C. Working Chemical Co., Los Angeles, Calif.
Ser. Sept. 17, 1946 D. U. Aug. 13, 1946

DYBASIK—VI—K—521,113
Fred Castle (Castle Products Co.), Los Angeles, Calif.
Ser. Apr. 22, 1947 D. U. Mar. 19, 1947

ELIZABETH COLETTE (and des.)—VI—C—498,686
Elizabeth G. Clark, New York, N. Y.
Ser. Mar. 21, 1946 D. U. 1926
Reg. 432,152 Aug. 19, 1947

ESTROBLUSH—VI—C—513,773
G. D. Runnels, New York, N. Y.
Ser. Dec. 5, 1946 D. U. Nov. 13, 1946

EX-MA-CIDE—VI—CT—514,845
Henry G. Raveling, Little Falls, Minn.
Ser. Dec. 26, 1946 D. U. May 1, 1944

(Continued on page 692)

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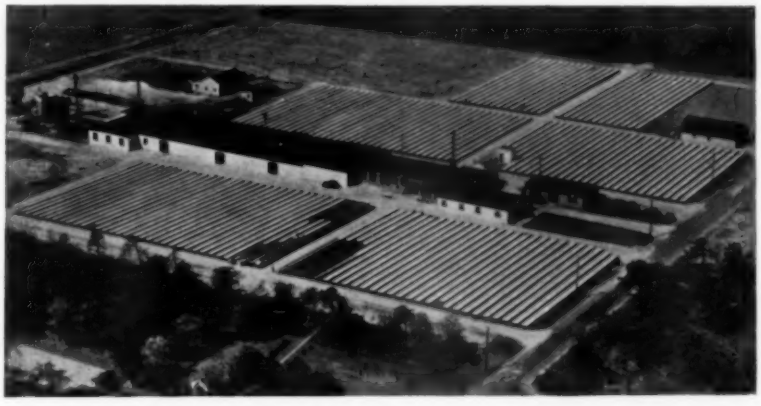

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Patent Thoughts and Trends

By THOMAS CIFELLI, Jr., Patent Attorney

A British View on Chemical Patents

One of the first articles which appeared in this department (January, 1947) dealt with the views of Dr. Klumpp, president of Winthrop Chemical, on the question of compulsory licensing of patents. The next contribution (February, 1947) considered the broad question as to whether patents covering new uses of old materials really promote progress in science and the useful arts—for which the U. S. patent system has been set up.

In line with the general nature of the subjects already treated, it seems desirable to inquire whether we should grant patents on new chemical compounds at all. Some might desire to restrict patent protection in chemical cases only to processes, leaving the way open to a later inventor to avoid the patent simply by making the compound in a new way.

Such a position is not novel, its proponents can point out with correctness. Some of the foremost European countries, including Great Britain, do not permit patent protection on new chemical compounds as such. Accordingly, a little excursion into the way the British rule has worked out would seem to be in order.

Perhaps it is not entirely fair to start out by saying that American chemical industry is at the very top of the heap and since the patent system admittedly is a prime factor in the equation, it naturally follows that the U. S. rule is better than the British rule. We must admit that the matter is not as simple as that, though the importance of the U. S. patent system as a vitalizing factor is well recognized by the leaders of the American chemical industry.

Perhaps it might not be a bad idea to find out what the British think about the question. If we look into the matter we shall find the answer very easily. Those who have the September 12, 1947 issue of the "Chemical Trade Journal and Chemical Engineer," a London publication, may see for themselves and need read no further here. Those who are not so fortunate will have to be content with this second hand version of the British view.

It seems that in April, 1944, a committee under K. R. Swan was set up by the president of the Board of Trade "to consider and report whether any, and if so what, changes are desirable" in the British patent laws. The Swan committee recently submitted its report, which apparently was a painstaking survey of the field. For present purposes we shall only consider what the report has to say about the subject of chemical patents.

The report noted that chemical compounds as such were denied British patent protection because of a limitation introduced in the British patent law in 1919, mainly on account of the numerous broad claims for new dyestuffs made by German inventors in Britain.

After careful study, the Swan committee recommended that the limitation be repealed—in other words, that patent protection on chemical compounds be permitted, as in the U. S. A. In coming to its decision, the Swan committee adopted as valid the contention that the "real invention lies in the discovery of a new substance with new and useful properties, and that the process of manufacture often involves little novelty in itself." Furthermore, it was felt that the British rule had little practical value, as "it merely encourages the drafting of a specification to cover all conceivable methods of manufacture, so that, in effect it is the substance itself and not the process of manufacture which is protected by the patent."

If the Swan committee is right, perhaps there is some soundness in our U. S. patent system.

Preparations for Combatting Cocci Infections

Meiser, a German, recently obtained a patent on preparations for combatting Cocci infections. The patent, U.S. 2,426,276, was assigned to Winthrop.

The active ingredients disclosed in this patent for use in preparations intended for the purpose under consideration are the esters of para-nitrobenzoic, para-nitro-thiol-benzoic and paranitrothionbenzoic acids with aliphatic alcohols which may be substituted by aromatic, alicyclic or heterocyclic radicals.

According to the patent the esters "may be used as such or in admixture with another or with other substances which are usual as components of medicinal preparations. By mixing several esters the solubility in solvents may be facilitated. The liquid esters, the alcohol radical of which contains about 6-8 carbon atoms, have proved particularly suitable for the manufacture of highly concentrated solutions of the esters in fatty oils and liquids. Suitable fatty oils are, for instance, sesame oil, olive oil and arachis oil which are miscible with such liquid esters.

"The therapeutic activity of the esters on infectious diseases of warm-blooded individuals can best be proved by treatment of infected animals. Various kinds of animals have been treated. All the esters recited above have been tested with mice which had been infected by means of cultures of various pathogenic bacteria varieties, since such tests allow the numerical determination of the activity in a convenient manner. The procedure for testing the activity of the esters was always as follows: A series of mice was infected by pathogenic bacteria of a definite type, a number of the infected animals, about a dozen, were left untreated as controls to see the effect of the infection and the other infected animals were treated with the active preparation by injection or perorally. The treatment was performed with gradually increased doses, which were administered once or several times. Whereas in nearly every experiment the untreated control animals all died within two days due to the infection, the therapeutic activity of the products which were administered to the infected animals was proved by the fact that all the treated animals or, due to the graduated desages a number of the treated animals, were still alive when the control animals had died. Repeated ad-

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Perfumes And Vitamin A

The newspapers and the recent New York meeting of the American Chemical Society gave some attention to synthetic Vitamin A. No U. S. patents have apparently been issued up to the date of this writing on the alleged syntheses in question, at least not right up to the vitamin. However, a recent patent did specifically suggest some connection with Vitamin A. This patent (U. S. 2,427,497) also is of interest because of its connection with the perfume field. Incidentally, that explains the heading of this section.

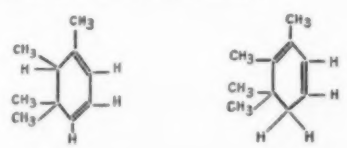
The patent deals with the treatment of allo-ociment to produce other terpenes. According to the patent both "isomers and polymers of allo-ocimene may be obtained simultaneously by heating allo-ocimene in the liquid state at a temperature in the range of about 100° to 200°C., as during purification by fractional distillation. Either atmospheric or sub-atmospheric pressures may be employed as desired. The amount and proportion of the isomers and polymers that will be produced depend upon the temperature and period of heating. For example, by fractionally distilling allo-ocimene slowly at a pressure of 20 mm. (still pot temperature 110°C.) over a period of 200 hours, polymeric and isomeric terpenes are formed in the ratio of about 7½ to 1, respectively. The isomers formed are chiefly monocyclic terpenes, boiling in the range of 48° to 72°C. at a pressure of 20 mm., and consist mainly of α-andβ-pyronene. The polymer is chiefly the dimer of allo-ocimene ($C_{20}H_{32}$), having a boiling point of approximately 180°C. at 8 mm. pressure.

"By increasing the temperature and decreasing the period of heating, there is effected an increase in isomerization and a decrease in polymerization. For example, at 400°C., the product obtained is substantially all isomeric monocyclic terpenes and only negligible quantities of the polymer are formed.

"The extent of isomerization can be followed during the reaction by observing changes in refractive index or density, or both. Since allo-ocimene at 20°C. has a refractive index of 1.544 and a density of 0.808 gram per cc. and since the isomers have an average refractive index of about 1.475 and a density of about 0.838, while the polymer under the same conditions has a refractive index of 1.523 and a density of 0.886 gram per cc., a maximum lowering of refractive index accompanied by a minimum increase in density will indicate the maximum proportion of isomerization and the minimum proportion of polymerization.

"The extent of polymerization depends upon the temperature and time of contact. The required time of contact decreases as the temperature increases. At temperatures below about 300°C. the isomerization is very slow and is accompanied by the simultaneous formation of excess polymer. At temperatures above about 500°C., considerable decomposition occurs which is accompanied by the formation of non-condensable gas. The preferred temperature range for the isomerization is about 300°C. to 500°C. with a time of contact of about 60 to 0.1 seconds.

"Maximum conversion appears to result at 440°C., using a time of contact of 7 seconds, giving a product having $n_D^{20} = 1.478$ and $d_4^{20} = 0.836$. Fractional distillation at 20 mm. shows the product obtained under these conditions to contain 90 per cent of isomeric terpenes, 3 per cent polymer, and 7 per cent unchanged allo-ocimene. The isomeric terpenes consist chiefly of the monocycle α- and β-pyronenes in the proportion of approximately 1 to 2, respectively, having the following structural formulae, respectively:



α-pyronene β-pyronene

"These pyronenes are tetramethylated cyclic hydrocarbons possessing conjugated double bonds, and the carbon skeleton corresponds to the ionone type perfumes and to certain vitamins, especially Vitamin A. These compounds, therefore, are valuable as intermediates in the synthesis of perfumes and vitamins."

The patent has been assigned by its inventor, Leo A. Goldblatt, to the U. S. A., as represented by the Secretary of Agriculture. The invention may be practiced by or for the U. S. government for governmental purposes without payment of royalty.

More On Benadryl

The Rieveschl patent on BENADRYL (assigned to Parke, Davis) was considered at length in this column, in the August, 1947 issue.

The same combination of inventor and assignee have since obtained another patent (U. S. 2427878, September 23, 1947), this one covering the dialkylamino propyl ethers of benzhydrol. The earlier patent covered these *propyl* derivatives broadly and corresponding ethyl derivatives specifically. What the later patent does is merely give Parke, Davis specific protection on the *propyl* derivatives to bolster its previously-obtained broad protection.

The propyl compounds, like the ethyl ones, possess antihistaminic properties.

Other Patents

U. S. 2,426,313—**(Wallace & Tiernan)—Azo Benzene 4, 4′-Disulfonamido Thiazole.**

U. S. 2,426,725—**(Resinous Products)—Esters of Endoethylene-substituted Cyclopentanols. Pharmaceutical intermediates.**

U. S. 2,426,882—**(American Cyanamid)—Sulfonyl Dicyandiamides (e. g., n-butylsulfonyl dicyandiamide). Sulfanilylguanidine intermediates.**

U. S. 2,427,368—**(Glidden Company)—Compounds of i-Bisnorcholenic Acid. Intermediates for Physiologically Active compounds.**

U. S. 2,427,576—**(Colgate-P-P)—Aliphatic Ethers of Halogen Alkyl Sulfonates, e.g., lauryl ether of a chlorpropane sulfonate salt. Wetting, washing and emulsifying agents.**

U. S. 2,427,577—**(Colgate-P-P)—Aliphatic Ethers of Polyhydroxy Alkyl Sulfonates. Wetting, washing and emulsifying agents.**

U. S. 2,427,658—**(Dow)—Amine salts of Trichloro-2-Hydroxydiphenyl. Parasiticides.**

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Chemical Depilatories

In a report on chemical depilatories, read before the eleventh International Congress of Pure and Applied Chemistry in London (through Perf. and Essent. Oil Rec. *38:231, 1947), F. Atkins gives the requirements of the perfect depilatory as follows: it would be a white odorless or pleasantly perfumed cream capable of removing hair cleanly and completely in an application of from two to three minutes, but incapable of damaging or irritating the skin of the user even by longer contact. The greatest obstacle to the complete realization of this dream of the perfect depilatory lies in the similarity in constitution between the outer protecting layer of the human skin and human hair. Both consist substantially of keratin. Anything which is capable of attacking and gelatinizing the keratin of the hair will also be capable of attacking the protective keratin layer of the skin. Neglect of this fundamental fact has been the downfall of many depilatories. Unaltered keratin is tough and insoluble in almost all known solvents. Certain reducing agents are capable in an alkaline medium of attacking the cysteine linkage of the keratin molecule, and breaking it in such a way that the hair is entirely changed in physical properties. It absorbs water, swells rapidly and loses its tensile strength, so that it can easily be scraped away from the skin with a blunt knife or spatula.*

Alkali and alkaline earth sulfides and sulphydrates, alkali cyanides, alkali stannites and salts of certain thio substituted organic acids, such as thioglycollic, are all capable of removing hair in the way described, but not all can be used in depilatories. On the basis of years of experience, Atkins is of the opinion that all alkaline salts can be eliminated from the picture. This at once cuts out sodium stannite, which is in any case very unstable, sodium and potassium cyanides, which are obviously very undesirable for other reasons, and sodium and potassium sulfides, sulphydrates, and thioglycollates. This is a pity, because sodium thioglycollate, were it not for the skin irritation difficulty, would constitute the nearest approach to the perfect quick-acting, odorless depilatory that has yet been devised. Ammonium salts, in general, have no depilatory action. This leaves the alkaline earth sulfides or sulphydrates and thioglycollates as the sole remaining possibilities.

The earlier depilatories were mainly made with solution of calcium sulphydrate made into a paste with slaked lime. Such pastes work reasonably quickly—usually in about four minutes. The smell of sulfide is rather pronounced, and by-odors are usually developed in the manufacture of the sulphydrate solution. These pastes are invariably discolored, due to the impossibility of obtaining a completely iron-free mixture. They tend to separate on keeping, and unless very well sealed will dry out in the tube. These disadvantages led to the production of a true cream depilatory when it was realized that the sulphated fatty alcohols such as Lanette Wax offer possibilities of a cream stable to alkaline earth salts.

At this juncture, Atkin's stresses an important point that is often overlooked. If one is making a cream depilatory the emulsion must be oil-in-water, not water-in-oil. A water-in-oil emulsion greases the skin and hair, so that the water-soluble reducing agent cannot act efficiently. An oil-in-water emulsion primarily wets the hair, so that the keratolytic can work even through a little wax or oil may be present. Strontium sulfide has been found most suitable for such products. Discoloration is reduced to a minimum, the creams are reasonably stable under storage, and the smell, while still objectionable, can be controlled and masked. A minor disadvantage lies in the limited solubility of the strontium hydroxide, which tends to crystallize into hard particles. Milling will temporarily overcome this difficulty, but it may reappear during storage with fluctuations in temperature. Such a cream is reasonably safe under all normal conditions of use, but the problem of the smell of these and of all sulfide depilatories has been, and still is, a serious drawback.

These and other troubles inherent in the use of sulfide depilatories have led to many attempts to produce odorless depilatories not containing sulfides. Most success has attended the recent use of thioglycollates. Thioglycollic acid has a most objectionable smell, but with the alkali and alkaline earth salts in the pH range of effective depilatory action, this smell practically disappears. For depilatories, the calcium salt is the one usually selected. However, such utility is covered by patents, such as British patent 484,467. In discussing this patent, Atkin's notes that the real advantages of this depilatory are absence of smell and discoloration. A serious disadvantage is the longer time required for thorough removal of the hair. This may seem a minor point, but Atkins feels that women have got so used to a product which works in three or four minutes that they do not take kindly to one which may require 10 minutes, or, in fact, even longer in certain cases. His observations have been that the thioglycollate depilatory takes from 2½ to 3 times as long as a similar sulfide depilatory to work, and there does not seem to be any practical method of speeding up this time which does not involve the introduction of alkali salts, which are highly undesirable.

Lanolin Saponification

It is stated in the *Perfumery and Essential Oil Record* (38:288, 1947) that a product very suitable for use in face creams and other emulsions can be obtained by the saponification of lanolin. In preliminary experiments 700 Gm. of lanolin were dissolved in 2,000 cc. of alcohol. To this was added 200 cc. of a 20 per cent solution of sodium hydroxide in water. The mixture was boiled under reflux for 4 to 6 hours and then cooled and added to 1,5000 cc. water. The water layer was decanted off and the residue extracted with benzene four or five times, using about 500 cc. each time. The extractions were mixed, washed with 500 cc. alcohol, and the benzene in the extractions distilled off from the soluble fatty material in a wide-necked flask. The fatty residue, a pale amber color, can then be melted, poured into an evaporating basin and dried completely free from benzene over a boiling water bath.

Particle Size in Face Powders

In a report delivered at the International Congress of Pure and Applied Chemistry in London (through Perf. & Essent. Oil Rec. *38:268, 1947), H. W. Hibbott noted that in the evaluation of a face powder its qualities are assessable in*

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terms of the physical properties of the raw materials and their particle size ranges. Qualitative analysis of a face powder will indicate the presence of a number of materials, each of which is included for one or more desirable properties. These may be listed conventionally as follows:

Covering power—Zinc Oxide, Precipitated Chalk, Starch, Titanium Oxide.

Waterproofness — Metal Stearates, Fats.

Softness of application—Talc, and to a less extent Aluminum Silicates, such as Kaolin.

Adherence to the skin—Zinc Stearate and Oxide, Precipitated Chalk, Titanium Oxide.

However, these properties are not exclusively conferred by the materials specifically mentioned. All the materials listed possess these four properties to a greater or less degree, and in all cases the decreasing of particle size enhances these properties.

The chemically prepared materials may be obtained in a fairly well defined range of ultimate particle size, usually of the order indicated in the following table. Of the naturally occurring materials, also listed, the particle sizing, particularly of talc, covers a much coarser range, depending on the degree of pre-crushing.

Material	Density	Ultimate particle size
Zinc Oxide	5.5	Below 3μ
Zinc Stearate	1.3	10μ to 1μ
Precipitated Chalk	2.7	Below 5μ mostly below 1μ
Magnesium Carbonate	2.2	Below 5μ
Titanium Oxide	3.8	Mostly below 1μ
Starch	1.5	20μ-3μ, according to source.
Talc	2.7	100μ-10μ
Kaolin	2.6	Below 50μ

In the chemically prepared materials it is seen that almost all are of particle size near the lower limit of microscope measurement. This feature has been an obstacle for a long time to further research on the properties of fine particles. The development of the electron microscope, with its greatly increased resolving power, is resulting in a gradually increasing mass of information on the sizes and shapes of particles of materials.

In considering the manufacturer of a face powder, says Hibbott, the main operation is the adequate mixing together and grinding of the various ingredients. He stresses that two operations are involved in the grinding procedure, namely, (a) splitting of the coarser and more frangible particles, and (b) the separation of aggregates of those materials of which the ultimate particle size is already below, say, 10 microns. In most types of dry-grinding machines it is unlikely that any actual splitting of the particles of these finer ingredients takes place. Probably the only types of machine in which any appreciable grinding of the talc and kaolin takes place are the higher speed impact mills and particularly the jet pulverizer. With regard to dispersion of aggregates, all the machines may be considered as more of less efficient mixing devices, depending on the proportion of power that can be brought to act effectively on the material, and the maximum effect in this respect is obtained with the jet pulverizer. Of course in all these methods the regularity of feed rate is of the utmost importance in ensuring the best possible uniformity of dispersion and blending of the raw materials.

In considering some of the advantages conferred by superfine grinding, it is pointed out that the desirable properties of face powder ingredients all increase with decreasing particle size. It will be obvious that the covering power and adherence qualities are dependent on the surface area per unit weight. All materials become more resistant to wetting as the particle size is reduced. The sensitivity of the skin is such that the impression of roughness in application even of very abrasive materials is not detectable when the particle size is below about 10 microns. Decreasing particle size allows much wider choice in formulation of face powders. For example, some of the more expensive or less readily available materials may be reduced or eliminated. In materials such as talc, which are reflective to light, as the particle size is reduced below 1 micron and approaches in size the wavelength of light some reflectivity is lost, thereby increasing the matt effect of a face powder.

The inclusion of colors, while present in minor proportions, are none-the-less important in the general make-up of free powder. The colors are available in fairly standardized particle size ranges, the natural earth colors usually being coarser than the chemically produced types. The lakes are of particle size down to 1 micron, and here again the better the dispersion the better the product. The customer should not be expected to complete the color blending of a face powder during the application to the skin with a powder puff.

Such points will serve to emphasize the desirability of attaining the lowest particle sizes possible. In the case of a given machine, in order to ensure uniformity of product, due attention should be paid to particle size control of the raw materials, optimum efficiency conditions of the machine, regularity of feed rate to within very close limits, and avoidance, as far as possible, of frictional heating.

Before concluding, Hibbott notes that the minor problem of the heating of the material during processing can become a serious trouble in practice. Fats which are usually incorporated in face powder formulations become more unguent as the temperature rises, with consequent clogging of the mill, leading again to further increase of temperature. This may cause some deterioration of the perfume and change in shade of the color lakes used. This is a most frequent cause of variation from batch to batch.

New Astringent Aluminum Salt

Chlorhydrol, a new aluminum salt—a basic aluminum chloride complex—is being produced by the Reheis Company of Newark, New Jersey. Originally intended to meet the need for a less acid astringent in deodorants, the product differs from the normal salts used for this purpose in the high pH of its solutions. It is a water soluble powder giving stable aqueous solutions. A 15% solution has a pH of 4.4, compared with pH 2.3 for a 15% solution of Aluminum Sulphate, N. F., and pH 2.2 for a 15% solution of Aluminum Chloride, N. F. Tests on frog skins show no loss in astringent value in spite of the high pH and for this reason its use in the pharmaceutical field is being rapidly extended.

Tocopherols as Antoxidants for Vitamin A

In investigations reported by L. O. Burton (Ind. & Eng. Chem. *39:224, 1947*) *pure β- and γ-tocopherols, alone and in association with vegetable oil lecithin, were studied for the inhibition of vitamin A destruction and peroxidation in soup-fin shark liver and halibut liver oils. Both forms of tocopherols were found to be effective antioxidants for retarding peroxidation, a characteristic not possessed by α-tocopherol. γ-Tocopherol was more effective for inhibiting peroxidation in the oils studied than was β-tocopherol, especially during the later stages of vitamin A destruction. β-and γ-tocopherol at a 0.10 per cent concentration markedly increased the stability of vitamin A in the various oils examined. Lecithin at a 1.0 per cent level enhanced the effectiveness of both tocopherols for inhibiting vitamin A destruction and peroxidation. No difference was observed between the antioxidant characteristics of pure natural γ-tocopherol and those of pure synthetic γ-tocopherol.*

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F. D. A. phenol coefficient 110 at 20.0° C. against Eberthella typhosa.

A. O. A. C. phenol coefficient 50 at 20.0° C. against Trichophyton interdigitale.

Solubility: Soluble in alcohols, ketones, propylene glycol, vegetable oils, fixed alkalies. Insoluble in water.

Toxicity: Non-toxic and non-irritating.

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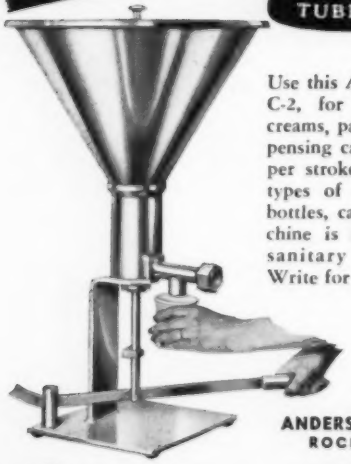

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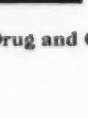

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READERS' QUESTIONS

ROLLING TYPE CLEANSING CREAM: We are interested in a rolling-balling type cleansing cream and would greatly appreciate your giving us representative formulas for this kind of product. Oakland.

Creams of the so-called rolling type can be made by incorporating a small proportion of casein in a standard cream base. A suitable preservative is necessary. Starch is used in a similar manner and the following cream should meet your purposes:

Mineral oil	**42.0**
Beeswax	**8.0**
Spermaceti	**9.0**
Powdered soap	**1.3**
Powdered borax	**1.0**
Distilled water	**21.7**
Powdered potato starch	**17.0**
Perfume to suit	

First heat the beeswax and spermaceti and the mineral oil in a hot water bath, then dissolve the soap in two ounces of hot water, also the powdered borax in two ounces of hot water, keeping them hot. When the wax and spermaceti are perfectly dissolved in the mineral oil, add first the borax solution gradually, and next the soap solution, also gradually, and stir or whip for fifteen minutes. Then take starch which has been previously sifted to a very fine powder, place in a mortar and gradually add the cream to the starch, lastly add the perfume oil.

WATERLESS HAND CLEANERS: We have an inquiry for a waterless hand cleaner that does not contain any abrasives to be made up into a cream for packing in tubes or jars. Can you please give us a formula that we can work from or develop. Dearborn.

A product of this type can be made from:

(A)	**Glyceryl monostearate**	**1.75 oz.**
	Sodium hydroxide	**2.50 "**
	Water	**3.00 qt.**
	Heat to boiling	
(B)	**Stearic acid**	**2.50 oz.**
	Mineral oil	**2.50 "**
	Paraffin wax	**11.50 "**
	Spermaceti	**7.00 "**
	Perfume	**0.20 "**

Heat in a double boiler until all is melted. Pour solution B into solution A with constant stirring, until cold.

Another product of this type containing a synthetic detergent may be made as follows:

White soap chips	**40**
Sodium alkyl aryl sulfonate	**10**
Water	**500**
Water-soluble perfume oil	**1**

This is a soft paste suitable for filling into collapsible tubes. It may be used directly on the hands and then wiped off with a rag, without the need of using any water.

ASTRINGENT LOTIONS: As a subscriber to your publication, I should like to take advantage of your Reader's Question department. Can you give me two or three formulas for making astringent lotions that will leave a pleasant after effect on the face? I should like a preparation which does not require elaborate equipment and which can be prepared by simply mixing and filtering. New York City.

One fairly simple preparation which should meet your requirements is made from:

Alum	**0.5**
Eau de cologne	**80.0**
Orange flower water	**19.5**

A somewhat more elaborate astringent lotion can be made along the following lines:

Boric acid	**1.5**
Glycerine	**2.9**
Menthol	**0.1**
Alcohol	**25.5**
Witch hazel	**30.0**
Rose water	**40.0**

BUFFERS FOR EYE LOTION: We are interested in obtaining information regarding the buffering of eye solutions. We have data concerning the common chemicals used in eye work, such as atropine, zinc sulfate, etc., but we would like to know how to calculate a buffer for such chemicals as mercury cyanide, pontocaine, etc. Huntington Park.

I think that you will find most, if not all of the information that you want presented in a very comprehensive study by H. W. Hind and F. M. Goyan in the February 1947 issue, page 33 of the *Journal of the American Pharmaceutical Association*, Scientific Edition.

TURBIDITY IN SHAMPOOS: I have been making a liquid shampoo but find that the final product is rather cloudy. I believe I do a good filtering job and so I cannot understand why I cannot obtain a clear, bright solution. Any help you can give me will be appreciated. Indianapolis.

As pointed out by Chilson, the elimination of turbidity and the permanent clarification of soaps is not a filtering problem at all. Filtering is of course essential, but the best filter in the world will not permanently clarify a soap that has not been properly made in the first place. The common causes of turbidity are:

1. **The use of water which has not been distilled.**
2. **Insufficient aging before filtration.**
3. **Insufficient saponification.**
4. **Presence of unsaponifiable foreign matter.**
5. **Failure to chill before filtration.**
6. **Carelessness in manufacturing procedure.**

ADVANCING THERAPY

Alcohol Vitamin A

A study of the comparative absorption of alcohol and ester vitamin A has been reported by A. B. McCoord, C. P. Katsampes, C. F. Lavender and F. J. Martin at the 112th meeting of the American Chemical Society. Their work indicates that the alcohol form of vitamin A is of particular importance to children with cystic fibrosis of the pancreas, a disease in which the pancreas is undergoing degeneration so that it cannot make the digestive juice necessary for the intestinal digestion of foods. Several children in one family may be affected with this disease, and they often die at an early age. Since these children cannot digest the common ester form of vitamin A, they are likely to suffer from vitamin A deficiency. The fact that they often die from pneumonia is explained in part by the fact that the lungs are especially injured by the vitamin A deficiency. When the predigested alcohol form of vitamin A is given to children with cystic fibrosis of the pancreas, it is very easily absorbed into their blood. Their physical condition can then be improved and they have a chance to live a longer and happier life. Methods are available for converting the naturally-occurring vitamin A esters into the alcohol form. Drug firms have shown interest in these processes and there is expectation that the alcohol form of vitamin A will be made available to children who need it.

These studies also showed that patients suffering from celiac disease, sprue, colitis and giardiasis had poor absorption of both the ester and alcohol forms of vitamin A. This inability to assimilate vitamin A has been a useful aid in the diagnosis and treatment of these conditions.

Penicillin Dicoumarol and Blood Clotting

In his report to the 112th meeting of the American Chemical Society, D. I. Macht states that numerous animal experiments plus clinical observations have revealed that all makes of penicillin tend to shorten the coagulation time of the blood. This occurs after both intravenous and parenteral administration, as well as oral administration of the drug. Amorphous penicillin is more active than the crystalline form in this respect. This, however, is not due to impurities, but to the fact that some of the penicillin principles present in the amorphous product are more thromboplastic than penicillin G.

The thromboplastic properties of penicillin can be counteracted by suitable doses of dicoumarol. However, when dicoumarol alone is employed as an anticoagulant agent it often produces dangerous hemorrhagic accidents. Macht's experiments on animals indicates that such complications can be counteracted by the harmless administration of penicillin. Thus the two drugs, penicillin and dicoumarol, can be employed advantageously to correct each other and prevent undesirable by-effects.

Amphetamine-Induced Weight Loss

It is generally agreed that the administration of amphetamine ("benzedrine") facilitates the reduction of weight. This effect of the drug was first reported in 1937, when patients receiving amphetamine for other purposes were observed to lose weight. Since that time a number of papers have appeared in which the drug has been reported to be of value in the management of obesity. However, it has not been demonstrated by controlled experiments that the drug actually causes a reduction of body weight. To remedy this situation and to obtain information on the mechanism of amphetamine in causing loss of weight, S. C. Harris, A. C. Ivy and L. M. Searle (*J. A. M. A.* 134:1468, 1947) began a series of studies on drugs and on human subjects. Under controlled conditions they demonstrated that the administration of amphetamine sulfate may cause or facilitate a loss of body weight in obese and nonobese persons. The evidence shows that the loss of weight observed in these experiments was due primarily to a reduction in the intake of food.

In a group of 10 subjects who maintained a constant caloric intake for one hundred days the administration of amphetamine sulfate for fifty-six days caused some loss of weight during the first four to eight days in 7 of the subjects. This weight loss was most reasonably attributed to a slight (approximately 10 per cent) increase in energy metabolism due to restlessness, which disappeared on the development of tolerance. No evidence of deleterious effects of the drug was observed.

In the animal studies a daily dose of 5 to 10 mg. of amphetamine sulfate injected subcutaneously into dogs (8 to 10 kilograms of body weight) one hour before the presentation of food, which was left in the cage for forty-five minutes, caused a complete abolition of food intake for from ten to twenty-one days in some dogs. This action of the drug was not influenced by extrinsic denervation of the stomach and intestine. The investigators interpret the evidence as an indication that the drug produces anorexia by acting on an appetite mechanism in the cerebrum or on a hunger mechanism resident at a lower level (hypothalamus) or both. Means for testing the validity of this interpretation are suggested.

Vitamin A in Water Emulsion

It is generally recognized that the utilization of vitamin A is to a large degree dependent upon the quality of its carrier oil, in which it is dissolved. Of definite interest, therefore, is the experimental work of G. R. Halpern, J. Biely and F. Hardy (*Science* 106:40, 1947) on the utilization of vitamins A in water emulsion. The vitamin A employed in their work was derived from two gray fish-liver oils of similar potency. Each of the oils was diluted with refined sunflower seed oil and with water to potencies of both 50 and 150 units per cc. The water emulsions were prepared by using 1 per cent "Methocel" (400 centipoises) as the emulsifying agent. The oils and water for the preparations were deaerated, saturated

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MINERALS COLORS PIGMENTS

with nitrogen, and stabilized with 0.05 per cent mixed tocopherols and 0.1 per cent soybean lecithin. In addition, the water phase of the emulsions was stabilized with 0.05 per cent gallic acid. Oils and water emulsions were stored in a cool place and thoroughly shaken before use.

To determine the efficacy of the vitamin A in the oil and in the water emulsion carriers, a biological assay was carried out with chicks. Study of the resulting data showed that all groups of chicks receiving the vitamin A in the form of a water emulsion grew at a markedly greater rate than those fed vitamin A in oil. From the method and basal diet employed, it would appear that the critical factor in these studies was the kind of carrier in which the vitamin A was supplied. These findings are in line with other, unpublished studies made in the same laboratory. These also showed that a watery emulsion of vitamin A, when mixed in feed, gave slightly better growth in chicks, then a feeding oil which had herring oil as a carrier.

These experiments are being continued, but the preliminary findings show that the use of water emulsions of vitamin A can be of importance, not only in the biological assay of vitamin A, but also in the field of nutrition, especially in those cases where fat metabolism is disturbed.

Caronamide Increases Penicillin Plasma Concentrations

There is general agreement that the attainment of high penicillin plasma concentrations is desirable in the treatment of various diseases. It is difficult however, to attain elevated concentrations because of the rapidity with which penicillin is absorbed from the site of injection and excreted by the kidneys. Various methods have been employed to maintain plasma concentrations of the drug above the commonly accepted therapeutic level.

A new approach to the solution of this problem is offered in the report of J. W. Crosson, W. P. Boger, C. C. Shaw and A. K. Miller (*J. A. M. A.* 134:1528, 1947) through the use of caronamide for increasing penicillin plasma concentrations. Caronamide (4′-carboxyphenylmethanesulfonanilide) is described as an orally effective compound of low toxicity, which is capable of producing a revisible inhibition of penicillin excretion by the renal tubules. In their studies, six patients given oral penicillin and oral caronamide showed increases of penicillin blood levels of from two to seven times those observed during control periods. Caronamide was given in doses of 2 Gm. every four hours. Buffering agents were not administered with the penicillin, patients were permitted to take fluids freely, meals were given in accordance with hospital routine and no effort was made to enhance penicillin levels apart from the administration of caronamide. Eight patients were given penicillin intramuscularly and caronamide orally. Five of these patients given either 1.5 Gm. of caronamide very three hours or 2 Gm. every four hours showed enhancement of penicillin plasma levels of from two to seven times those observed during control periods. Three patients given only 1 Gm. of caronamide every two hours failed to show the same degree of enhancement of penicillin concentrations, but some effect of the drug was indicated, particularly toward the end of the penicillin dose response curve.

This work showed that the new drug, caronamide, when administered orally, elevates the penicillin plasma concentrations two to seven times following the oral and parenteral administration of penicillin. Caronamide gives promise of great therapeutic usefulness in the treatment of conditions which require high penicillin blood levels.

Lactation Vitamin

M. El Shahat, of Cairo, has reported to the International Congress of Applied and Pure Chemistry (through *Brit. Med. J.* 2:181, 1947) that he has isolated a lactation vitamin from the oil of the fenugreek herb. This new substance was separated by chromatographic and other means in substantially pure form. It is described as fat-soluble, existing in needle-like crystals with a melting-point of 137° C., and with a characteristic absorption band. Other points bearing on identification are that it is thermostable, not readily oxidized, and contains a single hydroxyl group. Further, it has been differentiated spectrographically, chemically, and biologically from the tocopherols.

Clinical test at a dosage of 0.125 mg. orally were reported in the same communication. Out of 350 cases of human lactation deficiency, lactation is stated to have been promoted in 345. The volume of milk increased in 158 cases at different stages of lactation by amounts between 160 per cent and 900 per cent, the extent of increase being most marked in the earlier stages of lactation. Of these, 10 had twins and 6 had failed to improve with prolactin or poly-vitamin treatment. As regards the quality of the milk, the percentage of fat and the total content of vitamins A, B_1, B_2, and C are stated to have increased.

Toxic Reactions to Atabrine

Atabrine has found an important place in medicine as an antimalarial, but it does show occasional toxic reactions. In reviewing observations made on air force personnel, P. K. Smith *J. Nat. Malaria Soc.* 6:37, 1947) reports that the administration of atabrine dihydrochloride in certain doses is associated with a high incidence of gastrointestinal disturbances. The suppressive doses associated with the highest toxicity were those in which 0.2 Gm. or more was given as a single dose twice a week on nonconsecutive days. Toxic reactions were infrequent with daily doses of 0.1 Gm.

Streptomycin in Gonorrhea Therapy

The possibilities of streptomycin in the treatment of gonorrhea is indicated in a report by B. D. Chinn, L. E. Putnam, S. R. Taggert and R. P. Herwick (*Am. J. Syphiles, Gonorrhea and Ven. Dis.* 31:268, 1947). They gave each of 4 men with acute gonorrheal urethritis 0.1 Gm. of streptomycin sulfate dissolved in 3 cc. of isotonic solution of sodium chloride at hourly intervals for five doses. All were observed daily for three days after treatment and at the seventh and tenth days. All 4 responded promptly within twenty-four to forty-eight hours by a reduction or cessation of the urethral discharge. Cultures following prostatic massage at each examination were found negative. Later treatment with a single dose of 0.5 Gm. of streptomycin was attempted, and consistent cures could be obtained in this way. Single doses of 0.4 and 0.3 Gm. likewise proved effective in all of the cases, but smaller doses (0.2 or 0.1 Gm.) were not always effective. Patients failing to respond to streptomycin were cured with a second treatment of 0.2 Gm. of streptomycin or with penicillin.

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Industry's Books

Skin Manifestations of Internal Disorders (Dermadromes), by Kurt Wiener, M.D., Dermatologist, Mount Sinai Hospital, Deaconess Hospital, Saint Michael's Hospital, 661 pp., with 386 Illustrations, C. V. Mosby Co., St. Louis, $12.50.

Physicians have always been intrigued by the skin manifestations of internal disorders. An early diagnosis of diabetes from the inconspicuous "tan" of carotenemia; the estimation of the date of a heart attack from the position of the cross furrows on the fingernails; the suggestion of Addison's disease by the pigmented palmar creases of a patient who has no other complaint than fatigue; the intimation of pregnancy of a young woman who wants the little skin tags removed which suddenly appeared on her neck; these and other diagnostic feats have been a constant source of professional satisfaction. Since it seems that the tremendous wealth of clinical observations on cutaneous phenomena accompanying internal disease, has, in our time, not found the attention it deserves, the author has here tried to cover the field which the title of the book indicates.

Small Wonder, The Story of Colloids, by Gessner G. Hawley, 220 pp., Illus., Alfred A. Knopf, New York, $3.50.

The author here demonstrates his ability to write simply and entertainingly about a difficult scientific subject. The book is a simple, brief statement of the fundamental principles, the problems, and the achievements of the new science of colloids to date. Here are explanations of the nature and characteristics of many important foods, of plastics, and of familiar substances such as glue and soap; of many vital bodily structures and functions; of such industrial processes as the treatment and purification of water and sewage, the processing of crude oil and the homogenization of milk. More important for the layman, the author describes in non-technical language what colloids are, why they act as they do, and why their behavior really holds the key to the secret of life. The book offers the first full-length discussion of a new science in terms the layman can understand.

Useful Drugs, A Selected List of Essential Drugs With Brief Discussions of their Actions, Uses, and Dosage, Issued under the Direction and Supervision of the Council on Pharmacy and Chemistry of the American Medical Association, Fourteenth Ed., 241 pp., J. B. Lippincott Co., Phila., $2.

Useful Drugs is designed to supply the demand for a selected material medica and to serve as a basis for both instruction and state board examination in materia medica and therapeutics. The constant aim of the work has been to maintain a list of the more important drugs, by omitting those which have become superfluous, and adding others of established value at the time of each revision. The present edition is based on the Thirteenth revision of the Pharmacopoeia, the Eighth edition of The National Formulary, and the 1947 edition of New and Nonofficial Remedies.

Characterization of Organic Compounds, by F. Wild, M.A., Ph.D., F.R.I.C., Fellow and Tutor of Downing College, Cambridge, 306 pp., The University Press, Cambridge, 3.75d.

This is a practical book designed for use in the laboratory by Part II or final year students and research workers of all types. At present there is no book available which summarizes the methods and gives practical details for the preparation of suitable derivatives without which an organic compound cannot be identified with certainty. Every important general method, to the end of 1945, has been summarized, full practical details are given, and the preparation of the various necessary reagent is described. Many specialized methods and references to the literature are included.

Essentials Of Prescription Writing, by Cary Eggleston, M.D., Associate Professor of Clinical Medicine, Cornell University Medical College, Eighth Ed., 155 pp., W. B. Saunders Company, $1.50.

This small volume is a crystallization of many years' experience in teaching the subject of prescription writing, and has been prepared with a view of reducing the burden of the overworked student of medicine and of guiding him logically, but succinctly, in the proper construction of a prescription to fill any need. It has been the practice of the author to write very simple prescriptions, usually for a single therapeutic agent, and to use the metric system by preference, along with the accepted English title of the medicament. This practice is now frequently followed by others and a chapter on the subject has been introduced into the eighth edition. This, too, fits well with the current revision of the Pharmacopoeia, the text of which is arranged in accordance with the official English titles.

The Development of Modern Medicine, An Interpretation of the Social, and Scientific Factors Involved, by Richard Harrison Shryock, 457 pp., Illus., Alfred A. Knopf, New York, $5.

The small edition of this book published in 1936 by the University of Pennsylvania Press has long been out of print. Its appearance was an important factor in establishing Dr. Shryock as one of the foremost medical historians. Now the book is reissued, revised and enlarged, with new-up-to-date material. In telling the colorful story of medical science from the seventeenth century to the present day, Dr. Shryock has stressed the close relation between medicine and the general social history of humanity. Having started with the true beginnings of scientific medicine in the seventeenth century, and having analyzed the strange lag that during the eighteenth century accompanied social and intellectual confusion, he devotes his closest attention to what has happened since 1800. This compelling narrative is constructed around the story of French, German, and American pioneering medical centers and the theories and discoveries of outstanding medical figures. Richard Harrison Shryock was born at Philadelphia in 1893. Having taken his Ph.D. at the University of Pennsylvania in 1924, he served successively on the faculties of Ohio State University (1921-4), Duke University (1925-38), and the University of Pennsylvania (1924-5, 1938 to date), at which last he is now Professor of American History.

Perfumer's Shelf

Orange Oil Study

In a report on the anomalous characteristics of orange oils, F. J. Maffei (*Anais assoc. quin. Brasil.* 5:61, 1946, through *Chem. Abstr.* 41:5262, 1947) states that samples of genuine orange oils showing normal organoleptic properties often fail to meet the tests prescribed in the U. S. Pharmacopoeia XII. These abnormalities are in part traceable to differences in maturity of the fruit. For example, oil from partly ripened oranges shows smaller nonvolatile residues than oil from overripe fruit. The effects of differences in maturity may be masked by long exposure of the fruit to light in regions of intense insolation. Storage tests showed that the oil, when protected from light, may be kept up to three years with little change. Normal oils left for three months in the laboratory exposed to light and in some cases to air showed the following changes: specific gravity, from 0.845 to 0.874; index of refraction, from 1.4740 to 1.4780; rotation at 20°, from 86.0 to 98.6°; and, distillation residue, from 4 to 12.5 per cent. An oil exposed (A) in a closed glass flask to ultra-violet light from a Hanau lamp with a focus of 30 cm. and (B) in an open crystallizer for different lengths of time showed the following changes:

	A Original	40 hrs.	48 hrs.
Specific gravity	0.841	0.843	0.852
Index of refraction	1.4729	1.4734	1.4751
Specific rotation	97.4°	96.5°	92.2°
Distillation residue	1.6%	2.27%	6.5%
	B		
Specific gravity	0.842	0.845	0.850
Index of refraction	1.4727	1.4739	1.4745
Specific rotation	96.8°	95.9°	93.5°
Distillation residue	1.7%	2.4%	4.8%

As the percentage of nonvolatile residues increase, the index of refraction also increases. The addition of cottonseed oil raises the specific gravity and markedly decreases the index of refraction. A high nonvolatile residue is thus not necessarily an indication of fraud.

Other circumstances that produce characteristics beyond the pharmacopoeial limits are genetic (e.g. the variety "Bahia" is prone to show indexes above the limits), and differences in methods of extraction. For instance, oil obtained by centrifuging rasped orange peel in aqueous suspension has lower indexes than oil produced by pressing. The specifications of the U.S. Pharmacopoeia are criticized in that, while a lower limit of 1.7 per cent is fixed for nonvolatile residue, no upper limit is imposed directly, but indirectly the maximum is fixed at 4 per cent by reason of other specifications. This excludes many oils of undoubted genuineness. In Maffei's opinion, the purpose of inspection would be well served with determinations of only index of refraction and rotation on the original oil, dispensing with the official method of comparing the indexes of the original oil with the indexes of the first 10 per cent fraction.

Russian Patent on Menthol Production

Russian patent 65,823, granted to Ya. Ya. Makarov-Zemlyanskii, describes a method for extracting menthol from mint oil. In this process, mint oil is freed of terpenes by prolonged heating in a concentrated alkali solution. The terpenes are polymerized and the mint oil is removed by distillation. Subsequently, trimethyl borate is formed and is purified by washing with butyl alcohol, followed by recrystallization. The recrystallized product is steam-distilled to yield pure menthol, melting at 42-43°C. An alternate method consists of converting menthol into an alcoholate. To this end, purified mint oil is heated with solid sodium hydroxide in the presence of low-boiling fractions of mint oil. The water produced in the reaction is driven off, after which menthol is steam-distilled and separated by the usual methods.

Turkish Eucalyptus Oils

In an investigation on eucalyptus oils in Turkey, M. I. Okay and A. R. Gurgen (*Ankara Yuksek Zir. Enstitusu Derg.* through *Che;. Abstr.* 41:1391, 1947) analyzed the dry leaves of *Eucalyptus globulus*, *Eucalyptus amygdalina* and *Eucalyptus rostrata* for their essential oils. The yield of oil was 2.6, 0.7, and 0.6 per cent, respectively. The densities were 0.9304, 0.8972, and 0.911, respectively, and the indexes of refraction were 1.466, 1.500, and 1.490. While 79 per cent of the oil of *E. globulus* could be distilled off at 165-83° C, the oils of *E. amygdalina* and *E. rostrata* furnished only 36.2 and 33.8 per cent of distillate. The bulk of their oils boiled above 183° C. The cineol content of the oil from *E. globulus* was 70 per cent, but that of *E. amygdalina* oil was only 7 per cent. The oil from *E. amygdalina* had a pleasant perfume, but the oils from the other two had an irritating odor which produced coughing.

Essence of Moroccan "Harvest Fennel"

In studies of the aromatic flora of Morocco, J. Gattefosse and G. Igolen (*Bull. soc. chim*, 1946, p. 361) have investigated the essence of "harvest fennel" (*Ridol fa segetum*). In their procedure, the essence is washed with sodium carbonate solution to remove free acids and phenols and then with metabisulfite solution to remove aldehydes and ketones. It was then saponified, washed with water and distilled. The essence was found to consist essentially of about 50 per cent *d*-alphaphellandrene and about 33 per cent myristicin.

Essential Oils Discussed at International Chemistry Congress

The eleventh International Congress of Pure and Applied Chemistry, held in London during the Summer of 1947, had a new section devoted exclusively to essential oils, flavoring materials and cosmetics. Altogether, thirteen papers were presented before this new Section 14. Abstracts of some of these papers have been published in the *Pharmaceutical Journal* for August 2, 1947, and in the *Manufacturing Chemist and Manufacturing Perfumer for* August, 1947. Some of them are presented in full in the *Perfumery and Essential Oil Record* for July, 1947 and others will be published in subsequent issues. Some of these reports are condensed below:

Determination of Carbonyl Compounds

C. Scholtens pointed out that the determination of carbonyl compounds in essential oils has always been of outstanding interest both for the producer and the trade. Many methods were developed in order to obtain better and more accurate estimations. Among these methods, those using 2-4-dinitrophenylhydrazine are of considerable interest because this reagent may be used for estimating many ketones and aldehydes for which no accurate evaluation method was previously known.

The method described by Scholtens uses an alcoholic sulfuric acid solution of dinitrophenylhydrazine. In order

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to prevent formation of the slowly soluble sulfate of the phenylhydrazine, this is dissolved in concentrated sulfuric acid, afterwards diluted with water and finally ethyl alcohol is added. 2-4-dinitrophenylhydrazine was found to be an excellent quantitative reagent for the determination of carvone in caraway oil, dill oil and spearmint oil, of fenchone in fennel oil, menthone in peppermint oil, methyl nonyl ketone in oil of rue and cumaldehyde in cumin oil.

Citronella Oil Solubility Test

Noting that criticisms of the London solubility test for citronella oil have appeared recently, C. T. Bennett expressed the opinion that the new test should be generally adopted by analysts. For many years there has been controversy over "Schimmel's test" and this has arisen through misinterpretation of the test. By reducing the proportion of 80 per cent alcohol from 10 volumes to 4 volumes (which proportion shows the maximum turbidity) many adulterated oils will be rejected. Ceylon citronella oil will then fall into two classes: (*a*) pure oil with a high "geraniol content;" (*b*) commercial oil of inferior quality.

Palestinian Orange Oil

Recent developments, reported J. J. Nichols, have raised the status of Palestinian orange oils to a very high level, both as regards to quantity and quality. The oil is prepared by a modification of the Scorzetta method from the peel of *Citrus Aurantium Sinensis* (the sweet orange), grown in Palestine. The oil has characteristics similar to those of Rhodesian orange oil and has the following characteristics:

Specific gravity 15.5°C./15.5°C.	**0.850 to 0.852**
Optical rotation	**+97° to +99°**
Refractive index at 20°C.	**1.473 to 1.4745**
Residue at 100° C.	**3.2 to 3.8%**

It contains between 1.5 per cent and 1.9 per cent of aldehydes calculated as decylic aldehyde. The oil also contains about 90 per cent *d*-limonene, traces of *d* and *l*-terpineol, linalol, nonyl alcohol, and caprylic esters.

The flavor of the oil is similar in type to Rhodesian orange oil, but in the opinion of Nicholls is rather more delicate and has a fresher aroma. Two methods are given for determining the oxygenated bodies; such oxygen-containing bodies being generally recognized as the determining factors for flavor. By these methods, Palestinian orange oils compare very favorably with oils obtained from Sicily and Rhodesia.

The preparation of sesqui-terpeneless oils is also described briefly. This is best carried out in two stages. In the first stage most of the terpenes are removed in a steam-heated fractionating still at 5 mm. pressure. The best charge is 400 lb. of oil in a still with a 50-gallon working capacity. The still is fitted with a fractionating head of the bubble plate type. The distillation is carried on until nine-tenths of the volume has distilled over. This distillate, commercially described as "Orange Terpenes," is widely used by perfumery compound manufacturers and finds a ready market. The residue in the still, about 4 gallons, is frequently marketed as a 10 times concentrated oil.

To obtain the sesqui-terpeneless oil, this concentrated oil is transferred to a gas-heated still fitted with an efficient fractionating column, and with joints well sealed to obtain the highest possible vacuum. If the pressure in the still exceeds 1 mm. the resulting oil is likely to be burned and of inferior quality. The contents of the still are then slowly distilled, collecting about twenty equal fractions, using some modification of the Perkin triangle to maintain the vacuum in the still whilst the receiver is being changed. The various fractions are numbered and tested for solubility in 80 per cent alcohol. Those fractions which show a solubility at 20°C. of one part of oil in 9 volumes of alcohol are bulked together and form the sesquiterpeneless oil. The yield in the case of Palestine oil is usually 2.5 per cent, West Indian oil yields 2 per cent, and Rhodesian Orange oil yields 2.5 per cent, the percentage being calculated on the original oil used.

Aldehydes in Sweet Orange Oils

In the opinion of Y.-R. Noves, sweet oil of orange, the world production of which is nearly 800 tons, is of particular interest because of its aldehyde constituents. This authority, whose publications on this subject extend over more than 15 years, has recently detected the presence in this oil of lauric aldehyde of n-decene-2-al-(1) and of n-dode-cene-2-al-(1). He deduces, from his trials, the following content of the principal constituents in the aldehyde fraction: 31 per cent n-octanal, 27 per cent n-decanal, 6 per cent n-dodecanal, 4 per cent decene-2-al-(1), 3 per cent n-dodecene-2-al-(1), 7.5 per cent citrals. The co-existence of n-octanal and n-decene-2-al-(1), of n-decanal and n-dodecene-2-al-(1) and the absence of traceable proportions of the corresponding ethylene alcohols are remarkable facts from the biological point of view.

Brazilian Essential Oils

The essential oils of Brazil were discussed by W. H. Simmons. He noted that although Brazilian rosewood oil has been well-known on the market for some twenty years, it is only during the last few years that other Brazilian oils have come into prominence. Mint oil, of the *Arvensis* type, was the first newcomer, together with menthol derived therefrom, and this has been quickly followed by oils of sweet orange, mandarin, sassafras, eucalyptus citriodora, and geranium. In his paper, the properties of these oils are compared with similar oils from other countries, and important differences in composition and physical properties are pointed out. Typical figures are given for oils of various grades, both for the natural oils as directly produced, and those which have undergone some special treatment.

Pure Principle of Garlic Oil

Alliin, the pure mother substance of garlic oil has been isolated by A. Stoll and E. Seebeck (*Experimentia* 3:114, 1947). Alliin, which is a characteristic substance of certain garlics (e.g. *Allium sativum*, *Allium ursinum* and *Allium triquertrum*), was crystallized from dilute alcohol in fine, bushy, colorless, odorless crystals which melt with decomposition between 163° and 165° C. Its empirical formulas in $C_{13}H_{24}O_7N_2S_2$. Alliin is nonbactericidal, but a specific enzyme present in garlic causes the formation of allicin, which is highly bactericidal against both gram-positive and gram-negative organisms. Further decomposition yields volatile, highly odorous allyl sulfides.

New Studies on Viola Odorata

In a consideration of both old and new viewpoints on the fragrant violet, *Viola odorata* L., L. Kroeber (*Pharmazie* 1:85, 1946, through *Chem. Abstr.* 41:6022, 1947) states that chemical examination of the constituents of the root of this plant revealed for the first time the presence of saponins in addition to an alkaloid. This discovery offers scientific support for the previously empirical use of the violet root as an expectorant. The roots, leaves, and blossoms of the violet also contained methyl salicylate in the form of a glucoside. The characteristic violet odor of the blossoms is due to the presence of alpha- and beta-irone and alpha- and beta-ionone. These ketones, however, have not as yet been obtained from the violet blossom but only from the "violet root" of *Iris florentina* and *Iris pallida*, or are prepared synthetically from citral.

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Abreast of The Markets

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Minor adjustments of some prices in the fine chemical market stemmed from the fact that changing costs of production and a minimum of competition in some instances constituted the basis for price action. In the main, however, the market as a whole displayed considerable price stability.

Quinine seemed to be in somewhat better supply, but the reserves continued conservative. Menthol moved in jobbing quantities for the most part and and was without price change for the first time in many months. Camphor was active, enjoying the attention of seasonal users. Mercury seemed to have achieved something close to price stability and mercurials generally were held at steady prices. Tartar products were somewhat firmer in keeping with the recent rise in raw material quotations. Codliver oil was under excellent request at very firm prices. The market was stirred at two basic points, however, when higher prices were announced on pure and denatured alcohol, and also on less than car ot quantities of boric acid and borax. Castor beans continued to pour into the country. After a rising market in Brazil, unsettlement came to that market and price declines have been successive. Early in the period under review a sharp rise in quotations on caffeine alkalloid, citrated caffeine, and caffe ne hydrobromide was announced.

Alcohol Up

The steadily advancing prices being paid for blackstrap molasses by the makers of industrial alcohol—the most recent purchase was at 28.8c per gallon—has forced the industrial alcohol producers to advance prices 9c per gallon. The fact that the government agency for the sale of Cuban made alcohol have been selling to the domestic alcohol producers at the prices fixed by the agency would indicate that the supply position has tightened considerably. The new alcohol quotations were as follows: CD No. 12 and 13, less carlots $1.07 to $1.12 per gallon; SD No. 1 less carlots, $1.07 to $1.12; SD2B, less carlots, $1.07½ to $1.12½; SD23H less carlots $1.05½ to $1.10½; SD 29, less carlots $1.08 to $1.13; special solvent less carlots $1.07½ to $1.12½; pure ethyl alcohol, 190 proof, tax paid, less carlots $18.17 to $18.22.

Menthol Easy

Although open quotations for natural menthol remained unchanged during the current trading period, reports suggested that from time to time material was changing hands at prices shading the market as generally quoted. There was no reason to expect that large shipments would be forthcoming from China and it was believed that at least another year will pass before the Japanese return to the international markets in force.

Some reports from Japan state that only about 1,000 to 1,500 acres are under mint and that menthol production from the new crop will only amount to about 500 or 600 cases.

Efforts were being made in Brazil in late June to stabilize production of menthol at current price levels in the face of a serious market slump, reports the foreign press. The price of menthol already had declined very rapidly. Curtailment of large volume buying in the United States had left Brazil with excessive stocks and a few export markets.

During the war, menthol production in Brazil was so greatly encouraged by intensified foreign demand that entire communities, especially in the areas serviced by the Sorocabana and North Eastern railways, engaged almost exclusively in this type of peppermint growing.

• Prices quoted in this section were current on the first of this month,

Olive Oil Production and Exports, Spain

Trade circles estimated on August 1, 1947, that production of olive oil in Spain in the 1947 season (November 1, 1947 to May 15, 1948) may reach 450,000 metric tons, which is approximately the same production level that was predicted for the 1946 crop on August 1, 1946.

About 1 year ago the Spanish Ministry of Industry and Commerce announced the regulations covering the exchange of a maximum of 5,000 metric tons of olive oil for a similar quantity of soybean oil. By the end of December 1946 approximately 4,643 metric tons (10,235,958 pounds) of olive oil were shipped to foreign countries, of which 4,184 metric tons (9,224,046 pounds) went to the United States. The remainder went to Italy and England.

The Spanish Ministry of Industry and Commerce authorized informally on May 1, 1947, through the Sindicato del Olivo, the exportation of olive oil packed in tin containers at a minimum price of $220 per 100 kilograms (1kilogram equals 2,2046 pounds); and on July 31, 1947, it agreed to the exportation of olive oil of less than 1° acidity to the United States, packed in drums, at the minimum rate of $160 for 100 kilograms. Exportation of olive oil from Spain during 1947 has been small, reportedly because of the lower prices for this commodity which have prevailed in Italy and Greece.

In the first 7 months of 1947 Spain exported to the United States, 897,041 pounds of olive oil valued at $650,704.

Glycerin Firm

Following the brisk demand for glycerin over the past several weeks no fourth-quarter export licenses are expected to be granted until the middle of November it was learned here. Production is continuing at a good rate and is reported keeping abreast of consumption and it is quite likely the industry will close the year with a stock of about 50,000,000 pounds (absolute basis) which during the war years was regarded as a reasonably comfortable supply.

Immediately following the late ad-

(*Continued on page 691*)

Essential Oils Continue Downward Trend. Bois de Rose, Lemongrass and Citronella Off.

The downward trend in essential oil prices, persisting for almost a year, continued into the current trading period and gave little evidence of subsiding.

Essential oil imports of 502,820 pounds in July represented a 56 per cent increase over June arrivals. Increased tonnage receipts were noted in such oils as anise, bois de rose, cassia, cedarleaf, citronella, eucalyptus, juniper, lavender spike oil, lemongrass, orange, petitgrain, and vetivert.

The 56 percent increase in essential oil receipts during July, however, still left the 7 month aggregate 804,912 pounds, or 18 percent, below arrivals during the January-July period of 1946.

The prospective production of domestic mint oil in 1947 is placed at 2,034,000 pounds, 26 percent above the 1946 production of 1,620,000 pounds and 63 percent above the 1936-45 average of 1,245,000 pounds. This estimate, made by the Department of Agriculture, includes peppermint oil, 1,624,000 pounds, and spearmint oil, 410,000 pounds, ndicated for 1947.

Bois de Rose Down

Brazilian Bois de Rose went down in price again to follow the trend that was established some weeks back when the oil became available on the American market in large quantities and demand for it could not keep up with the heavy supply. The lowest quotation noted for this item was $3.30 per pound, which represented a drop of 20c from our previous report. The outside price, however, was unchanged at $5.50.

Lemongrass Oil Lower

Both supply and demand for lemongrass oil were good during the trading period under review and the inside price of the product came down 5c per pound. The new range was established at $1.25 to $2.30 per pound.

The area under lemongrass cultivation in southern India during the 1946-47 season is estimated at 25,000 acres, compared with 22,000 acres in 1945-46 and 25,000 acres in 1944-45.

Output of oil in 1946-47 (July through January) is estimated at 550 long tons, the highest yield in the past 7 years. Figures for preceding years are: 1945-46, 500 long tons; 1944-45, 400 long tons; 1943-44, 200 long tons; 1942-43, 350 long tons. Increases in both acreage and oil production in 1946-47 are attributed to previous price rises.

The general trend in prices of lemongrass oil since December 1946, however, has been downward. In that month, the export price of lemongrass oil, per pound, c. & f. New York, was $3.55, whereas in June 1947, the price had dropped to $1.15. July prices rose slightly to $1.25 per pound.

About 95 percent of southern India's production of lemongrass oil is exported, only a small quant'ty being used locally in the manufacture of soap. The two chief purchasers are the United States (the largest market) and the United Kingdom.

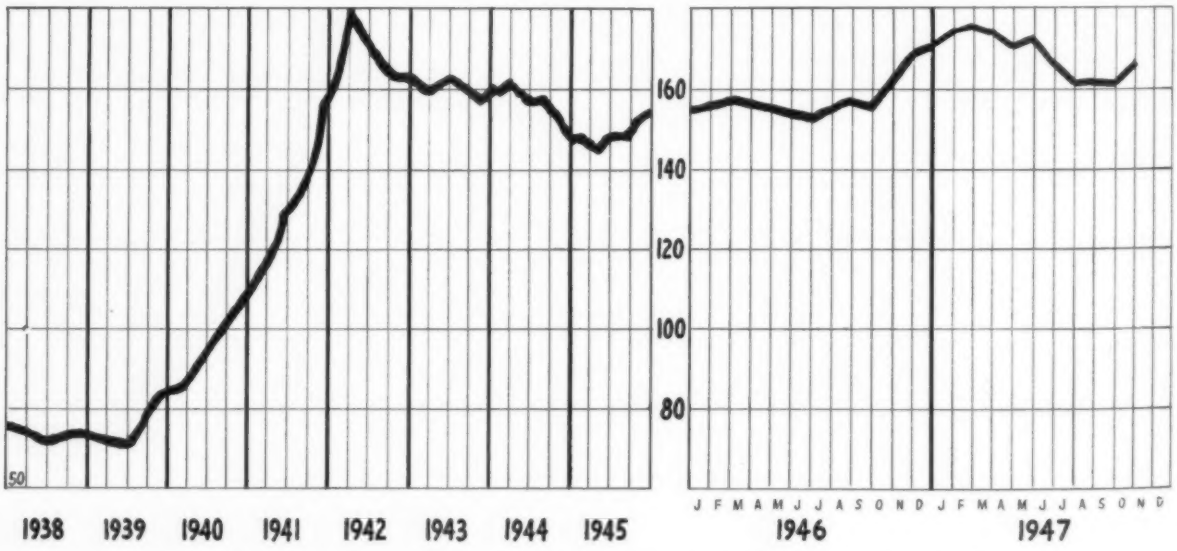
Exports of lemongrass oil from southern Indian ports in the year April 1946 through March 1947 totaled 1,151,184 pounds, valued at 10,768,050 rupees, of which the United States accounted for 657,155 pounds, valued at 6,020,314 rupees. South Indian exports of this oil from April through June 1947 amounted to 289,503 pounds with a value of 1,971,631 rupees. The United States took 124,320 pounds, valued at 683,495 rupees.

In the period April 1945 through March 1946, exports of lemongrass oil from South Indian ports totaled 1,280,960 pounds, valued at 6,960,957 rupees. The United States accounted for 1,089,954 pounds, with a value of 5,635,267 rupees.

At the beginning of the 1946-47 season, stocks were estimated at 20 to 30 tons. Stocks moved during 1946-47 season, are estimated at 520 tons. Carryover stock at the beginning of the 1947-48 year is estimated at 32 tons.

The Government of Travancore recently has sanctioned a 5 year scheme for the establishment of a lemongrass experiment station for investigation and development of superior stocks of lemongrass in the State. As Travancore produces a large proportion of the world's output of lemongrass oil, this plan, according to some sources, has been approved to maintain the present favorable trade position.

50 Raw Materials—Weighted Price Index. 1926=100.



The price index of fifty commodities for October advanced substantially from 162.6 to 169.4.

ELASTICOTE #183

The key to the longest wearing manicure ever known to the consumer.

Truly something new and different.

Write to *Durlin* for samples and information about this new synthetic product.

Another reason why *Durlin* is:

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You find it in the perfumes and toilet waters of the foremost French perfumers as well as in the creations of the most successful American manufacturers.

It is difficult to define and yet, if it is absent, it is immediately detected. In most cases it is due to higher purity of the perfume raw materials used.

The aromatic chemicals you specifiy may easily double—or halve—the repeat sales value of your most prized creations.

With Synfleur perfumers' and soap makers' materials every delicate shade of odor in your original creation is permanently preserved in its full strength, no matter how long the finished product is kept.

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OCTOBER PRICE CHANGES

UP

Alcohol SD1 9c gal.
Belladonna leaves 20c
Borax 8c lb.
Boric acid 8c lb.
Caffeine a kaloid 50c
  Citrated 25c
Carnauba wax No. 1 9c
Chamom le flowers Roman 5c
Ethyl acetate 3c
Japan wax 11c
Potassium acetate 2c
Senega root 25c
Stearic acid TP 2½c

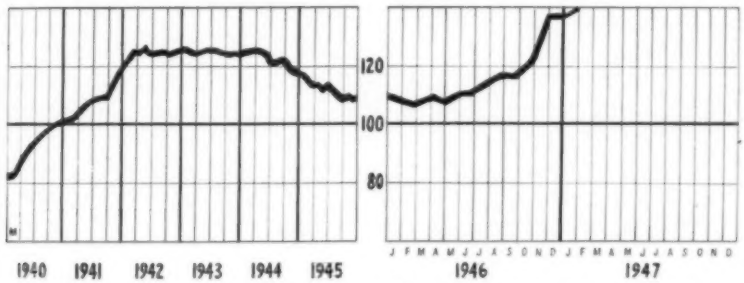
DOWN

Aloes Curacao 8c
Balsam Copaiba SA 20c
Bois de Rose Brazilian 20c
Cardamom oil $3.50
Citronella oil, Ceylon 20c
Cubebs oil 75c
Culvers root 5c
Eucalyptol 5c
Geranium oil African 75c
Golden Seal Root 60c
Irish Moss 4c
Jaborandi leaves 1c
Lemongrass oil 5c
Linalool 65c
Linalyl acetate 80c
Mustard oil, Artificial 10c
Patchouli oil $1.50
Pineneed e oil 85c
Rosemary oil 10c
Vanilla beans Bourbon 25c
  Mex. cuts $1.
  Mex whole 50c
Wormseed oil 40c
Wormwood oil 25c

Citronella Lower

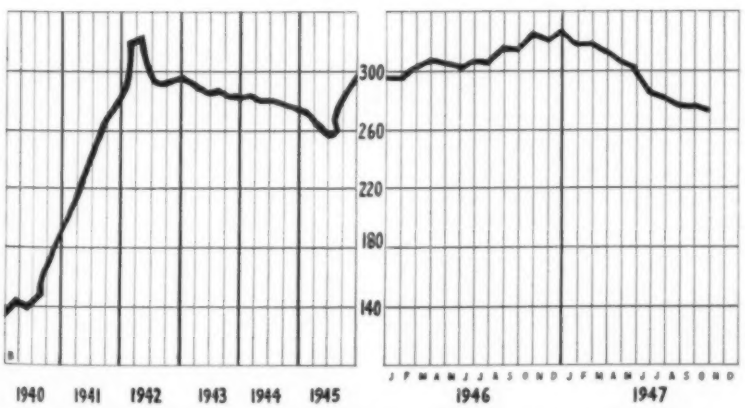
Ceylon citronella oil has reached a new low price of 80c per pound. Although reports from the primary market have recently shown signs of strength, the availability of oil from other sources is believed to be a factor in preventing any decided recovery in values.

15 Medicinal Chemicals—Weighted Price Index. 1926=100.



The medicinal chemicals index rose rather sharply from 168.6 to 183.2 due to advances in alcohol and boric acid.

15 Botanicals—Weighted Price Index. 1926=100.



The botanicals index declined slightly from 284.9 to 283.4. Aloes declined rather sharply, but belladonna advanced.

Bergamot Oil Easy

The Italians were reported selling oil bergamot at a lower price on the spot market than for future shipment. The reason for this was believed to be heavy stocks on hand which Italian dealers are willing to dispose of at almost any price. In this country, the price of the natural Italian oil remained at $4.40 to $5.50. Supplies were good but demand continued to be only fair. When this country was cut off from Italian supplies during the war, users here began to buy artificial bergamot, and dealers say that many are still doing so, thus cutting down the demand for the natural product. The bulk of the orders for the natural oil has been coming from perfumers, it was said.

Cedarwood Oil Uncertain

Cedarwood oil showed no change in price during the current trading period, but those in the trade were uncertain what to expect concerning future prices as a result of the recent curtailment of production in Texas and in the southeastern states of Virginia, North Carolina, Tennessee and Alabama. Recent information was received in New York indicating that there were no plants operating in Texas and that in the southeast out of five major producing plants one had burned down and only three of the others were in operation. It was considered possible that this would have no immediate effect on the price range because cedarwood had been in overproduction for some time. Demand had not been good and the closing of the plants brought about a closer alignment of the supply and demand picture, it was said. Should demand fall off any more, it was felt, prices might fall with it. Demand in the recent past was reported to be far under that of the war years when buyers were using cedarwood in place of the imported oils, such as vetiver and patchouli, which they were unable to obtain at that time.

Petitgrain Oil Firm

There were no reported price changes in the $3.25 to $4.30 price range for oil petitgrain. Supplies were still arriving in good quantity from Paraguay.

Declared exports of petigrain oil from Paraguay to the United States during the first 7 months of 1947 amounted to 32,713 kilograms, with a value of $175,441, compared with 57,751 kilograms, valued at $345,215 in the like period of

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Albumin Tannate
(Syn. Tanalbin) U.S.P. XI
Methenamine Anhydromethylenecitrate
N.N.R.
(Syn. Helmitol)
Ethyl Chaulmoograte, U.S.P. XII
Ethyl Morrhuate, N.N.R.
Sodium Morrhuate, N.N.R.
Tannin Formaldehyde
(Syn. Tannoform)
Menadione, U.S.P. XIII

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HYOSCINE
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N. N. R. 1947
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Manufacturing Chemists
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QUININE SULPHATE
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10 ROCKEFELLER PLAZA, NEW YORK, N. Y.
TRIBUNE TOWER, CHICAGO, ILLINOIS

1946. Such exports in July 1947 were 5,250 kilograms valued at $31,430, as compared with 6,011 kilograms valued at $47,527 in the corresponding month of 1946.

Glycerin Firm

(*Continued from page 687*)

vance in soap prices, glycerin buyers rushed into the market fearing that the rising trend in fats and oils would result in an advance in prices. The advance having failed to materialize the demand in the past week of the period under review has slackened off somewhat.

With refined glycerin prices remaining stable it is not likely that holders will sell much crude at above 20c per pound. In fact some producers explain that they could not pay 20c and sell refined material at current levels.

Caffeine Up

Prices for caffeine were advanced with crystals going to $4.25 per pound in lots of 100 pounds or more; anhydrous, $4.50; citrated, $2.75. Winter requirements for citrated material were under consideration and distributors of this seasonal item indicated a gain in the movement from their present stocks. Demand for alkaloid existed in a degree beyond the ability of all those receiving the request to meet on a reasonably prompt basis. Second hands in some instances were advertising for goods.

Boric Acid Higher

Freight rates were recently advanced and producers of boric acid raised their quotations on less than carlot quantities. The increase amounted to from $2.20 to $2.50 per ton as to seller. The cost of acid in carlot quantities will also be higher but will vary according to the delivery point. Freight rates prevailing prior to July 1, 1946, will be allowed but increases in the rate after that date is, by contract provisions, for buyers' account. The base price is still at the works. The above conditions apply equally to borax prices.

Camphor Steady

Fall and Winter needs for powdered synthetic refined camphor are increasing. Major distributors are reported keeping abreast of deliveries and quotations remain steady at previous levels.

According to reports from abroad, the Chinese Government through the National Resources Commission entrusted with the development of Formosa is making every effort to rehabilitate the Island's camphor industry which prior to the war supplied about 70 per cent of the world's requirements of natural camphor. Currently there is no production but an official of the Taiwan Camphor Co. is quoted by Reuter as stating that half of the company's 1,000 ton stock at the time of the Japanese surrender is intact with no buyers yet in sight.

Mexican Vanilla Lower

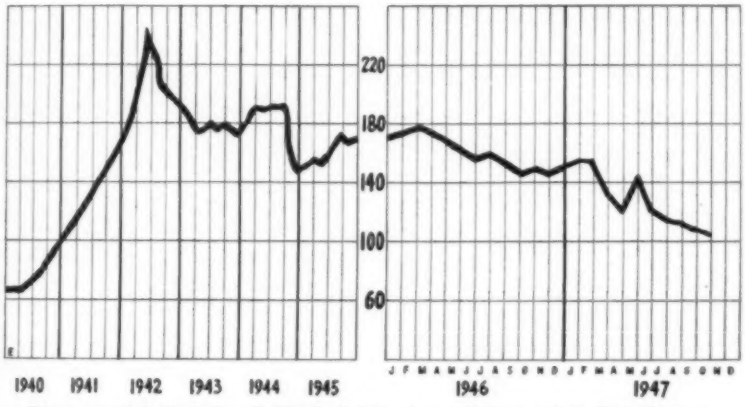
Prices on Mexican vanilla beans became lower during the early part of the trading period under review, dropping to $10, to $11, per pound for whole beans with cuts reaching $8.50 to $9. The movement appeared to be based on the greater availability of merchandise and the rise of more competition than had appeared in the market for some time past. During late trading, however, the market steadied considerably.

Reports in local circles indicated that information concerning the future of prices on Bourbon beans indicated an advance in price and a revision of the classification at the source. A price of $16.50 at Madagascar has been proposed for heads and tails but sellers' ideas are about $17.50. For the second classification, being 25 percent first and 75 percent seconds, $16 has been proposed. Thirds and ordinaries come under the third classification and the proposed price is $15. The new classification—the fourth—is for fourths and ordinaries and the price suggested is $13.50. All prices were per kilo. At this writing it was learned that shipment prices had been advanced 75c per kilo on some beans and as much as $1.50 per kilo on others. The average of advances was $1 per kilo. The effective date was put as of October 15.

Irish Moss Down

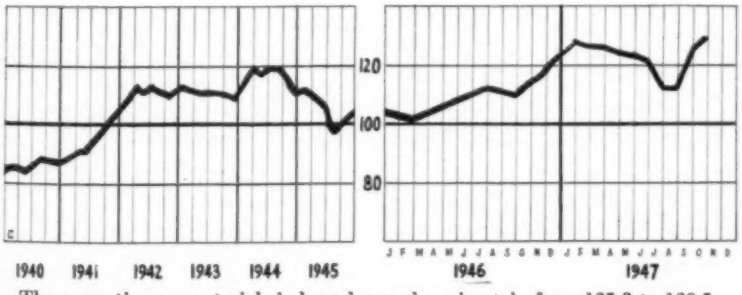
The warehouse stocks of Irish Moss were said to be very heavy and the market was lower and distinctly favorable for consumer operations. Quotations were noted at a range of from 20c to 21c per pound for a prime quality of bleached moss. To the large holdings of French moss have been added supplies of domestic origin the sale of which has become very difficult now that the more desirable French moss has become available.

15 Essential Oils—Weighted Price Index. 1926=100.



The essential oils index declined slightly from 117.8 to 115.5. Bois de rose, citronella, and geranium oils declined, while lemon oil advanced.

25 Cosmetic Raw Materials—Unweighted Price Index. 1926=100.



The cosmetic raw materials index advanced moderately from 125.3 to 128.5. Alcohol and Japan wax advanced, while lanolin declined.

Your Trade-Mark Record

(*Continued from page 669*)

EXTANE—VI—T—520,267
Cook Chemical Co., Kansas City, Mo.
Ser. Apr. 7, 1947 D. U. Mar. 3, 1947

FEATHER BATH—IV—A—509,172
Soil-Off Manufacturing Co., Glendale, Calif.
Ser. Sept. 16, 1946 D. U. July 1, 1946
FERVEUR—VI—BC—516,631
Parfumerie Lubin, S. A., Paris, France
Ser. Jan. 30, 1947 D. U. Apr. 12, 1928
FINELL—VI—D—516,590
Victoria Chemical Co., Newark, N. J.
Ser. Jan. 1947 D. U. Jan. 22, 1947
FIVE O'CLOCK—VI—B—518,832
Gourielli, Inc., New York, N. Y.
Ser. Mar. 11, 1947 D. U. Feb. 15, 1947
FIZZORAL—VI—K—519,671
Ralph L. Lenhart, New York, N. Y.
Ser. Mar. 27, 1947 D. U. Oct. 1, 1946
FLAMING SKY—VI—C—521,640
Dermetics, Inc., New York, N. Y.
Ser. May 1, 1947 D. U. Nov. 22, 1946
FLIK-O—IV—A—508,988
The Emkay Chemical Co., Elizabeth, N. J.
Ser. Sept. 13, 1946 D. U. Apr. 1, 1946
FLOWERS SPEAK—VI—BC—509,194
Biro, Meyne & Biro, Inc., New York, N. Y.
Ser. Sept. 17, 1946 D. U. Sept. 10, 1946
FORGIVE ME—VI—B—510,562
Avon Products, Inc., New York, N. Y.
Ser. Oct. 10, 1946 D. U. Aug. 28, 1946
FORMULA NO. 5—VI—M—488,598
Kenneth W. MacPherson, (Embee Presc. Pharmacy), Harlingen, Tex.
Ser. Sept. 17, 1945 D. U. July 1, 1940
FORTY THIEVES—VI—B—524,817
Anatole Robbins, Inc., Los Angeles, Calif.
Ser. June 25, 1947 D. U. Dec. 16, 1940
FRATERNITY—VI—B—516,193
Irresistible, Inc., New York, N. Y.
Ser. Jan. 23, 1947 D. U. Dec. 13, 1946

GAMECOCK—IV—I—515,231 (and des.)
Leo Mann, Boston, Mass.
Ser. Jan. 3, 1947 D. U. Nov. 23, 1946
GAMMOL—VI—T—520,684
California Spray-Chemical Corp., Wilmington, Delaware
Ser. Apr. 15, 1947 D. U. Mar. 20, 1947
GAVICIDE—VI—T—517,150
Pacific Guano Company, Berkeley, Calif.
Ser. Feb. 7, 1947 D. U. Sept. 1944
GENTLEMEN'S 745 AM NICETRIES (and des.)—VI—FI—497,039
Harold L. Polacheck, New York, N. Y.
Ser. Feb. 21, 1946 D. U. Jan. 15, 1946
GERVA—VI—S—517,033
Chesda Co., Washington, D. C.
Ser. Feb. 6, 1947 D. U. Jan. 6, 1947
GINET (and des.)—VI—C—508,896
Virginia Demoro (V. Demoro), Riverside, N. Y.
Ser. Sept. 12, 1946 D. U. August 1946
GLANCE—VI—A—518,938
Colgate-Palmolive-Peet Co., Jersey City, N. J.
Ser. Mar. 13, 1947 D. U. Feb. 28, 1947
GLISSADE—VI—BC—521,761
S. A. Renaud Paris 1817, France
Ser. May 2, 1947 D. U. Mar. 18, 1943
GOLLIWOGG—VI—BC—514,635
Vigny, Inc., New York, N. Y.
Ser. Dec. 20, 1946 D. U. March 1922
GOLLY—IV—M—509,272
Walter A. Gulden, (Nugel Chemical Co.), Norfolk, Neb.
Ser. Sept. 18, 1946 D. U. Jan. 10, 1945
GOSSIP—IV—A—508,603
Mineral Cleansers Company, New York, N. Y.
Ser. Sept. 6, 1946 D. U. May 21, 1941
GRANDE EPOQUE—VI—B—511,357
Soc. d'Etudes et d'Expansion de la Parfumerie de Luxe, Paris, France
Ser. Oct. 23, 1946 D. U. Sept. 12, 1946
GY-COP—VI—T—520,159
Geigy Company, Inc., New York, N. Y.
Ser. Apr. 4, 1947 D. U. Mar. 24, 1947

HAPPY LANDING—VI—ABCH—517,516
Parfums Chinon, S. A. R. L., Montrouge, France
Ser. Feb. 14, 1947 D. U. Feb. 28, 1946
HEADY—VI—BC—512,243
Consolidated Cosmetics, Chicago, Ill.
Ser. Nov. 8, 1946 D. U. Sept. 21, 1942
HEART TO HEART—VI—B—519,648
Gourielli, Inc., New York, N. Y.
Ser. Mar. 27, 1947 D. U. Feb. 15, 1947
HED-GENE—VI—T—510,644
Baldwin Pharmacal Co., Newark, N. J.
Ser. Oct. 11, 1946 D. U. Sept. 23, 1946
HOPE CHEST—VI—BC—516,755
Avon Products, New York, N. Y.
Ser. Feb. 1, 1947 D. U. Jan. 20, 1947
HOPSCOTCH—VI—C—512,336
Lehn & Fink Products Corp., Bloomfield, N. J.
Ser. Nov. 9, 1946 D. U. Oct. 8, 1946
HYANILID—VI—T—523,152
Wright & Lawrence Labs., Inc., Chicago, Ill.
Ser. May 27, 1947 D. U. Oct. 3, 1946

ICEGLO—IV—I—505,767
Noxzema Chemical Co., Baltimore, Md.
Ser. July 17, 1946 D. U. October 1932
I NO-U NO—IVV—A—511,822
Lee E. Logan, Edgemont, S. Dak.
Ser. Oct. 31, 1946 D. U. Aug. 13, 1946
INDELIUM—VI—CEH—514,484
David J. Maxin, Chicago, Ill.
Ser. Dec. 18, 1946 D. U. Aug. 1, 1945
INDIAN PENNY—VI—CE—513,048
Barbara Gould, Inc., New York, N. Y.
Ser. Nov. 22, 1946 D. U. Sept. 27, 1946
IN-SEC-TOL—VI—T—524,564
J. W. Quinn Drug Company, Greenwood, Miss.
Ser. June 20, 1947, DU April 1919
INSEPARABLE—VI—ABCDEH—508,183
Roberto Alonso Planas, Havana, Cuba
Ser. Aug. 28, 1946 D. U. 1944
INTELLIGENCE—VI—B—516,306
Parfumerie Violet, S. A., Paris, France
Ser. Jan. 24, 1945 D. U. May 11, 1945
IN THE PINK—VI—AB—512,678
Lehn & Fink Products Corp., Bloomfield, N. J.
Ser. Nov. 15, 1946 D. U. Nov. 9, 1945
ISAAC'S SATISFACTION—VI—T—508,732
Freddie Hayes Isaacs (Mark Isaacs & Co.), Jacksonville, Fla.
Ser. Sept. 9, 1946 D. U. 1923
IVY—VI—H—519,754
Jodoin's Ivy Products, Vacaville, Calif.
Ser. Mar. 28, 1947 D. U. 1904

KENEK—VI—G—523,721
Vincent N. Nicosia, Houston, Texas
Ser. June 6, 1947 D. U. Mar. 25, 1947
KONK—VI—H—509,689
Bell & Hudgins Chemical Co., New York, N. Y.
Ser. Sept. 25, 1946 D. U. May 20, 1946

L A M O—VI—C—518,373
Tailby-Nason Company, Cambridge, Mass.
Ser. Mar. 1, 1947, D. U. Feb. 1, 1940
LEARPENTELLY (and des.)—VI—K—522,001
Mariano Marchetti, Roseville, Mich.
Ser. Apr. 17, 1947 D. U. Feb. 10, 1946
LE SOULIER DE BALLERINE—VI—ABCHS—512,897
Coty, Inc., New York, N. Y.
Ser. Nov. 20, 1946 D. U. Nov. 14, 1946
LEONID DE LESCINSKIS—VI—B—504,912
Leonid de Lescinskis, New York, N. Y.
Ser. July 1, 1946 D. U. 1940
Reg. 432,321 Aug. 26, 1947
LEXONE—VI—T—520,936
E. I. du Pont de Nemours and Co., Wilmington, Del.
Ser. Apr. 18, 1947 D. U. Feb. 5, 1947
LIBAIN—VI—H—513,022
B. L. & M. Laboratories, Inc., Morgantown, W. Va.
Ser. Nov. 22, 1946 D. U. July 15, 1946
LIPAN—VI—M—515,337
Spirt & Co., Inc., Waterbury, Conn.
Ser. Jan. 6, 1947 D. U. Nov. 1, 1946
LIZ MAE—VI—H—520,154
Lizzie Mae Early, Washington, D. C.
Ser. Apr. 4, 1947 D. U. Oct. 7, 1944
LOURNAY—VI—C—522,201
Colgate-Palmolive-Peet Comp., Jersey City, N. J.
Ser. May 10, 1947 D. U. Apr. 23, 1947

LOVE IN BLOOM—VI—B—515,049
Helena Rubenstein, Inc., New York, N. Y.
Ser. Dec. 30, 1946 D. U. Nov. 26, 1946
LOVE LACE—VI—B—507,217
Quality Products Co., Inc., New York, N. Y.
Ser. Aug. 10, 1946 D U. May 8, 1946
LURAVEL—VI—H—523,678
Joseph A. Femiano, (Farr Products), Trenton, N. J.
Ser. June 6, 1947 D. U. Mar. 26, 1947

MCP—VI—T—518,771
Mill Creek Products, Kansas City, Mo.
Ser. Mar. 10, 1947 D. U. May 29, 1945
ML—IV—AM—498,299
Midland Laboratories, Dubuque, Iowa
Ser. Mar. 15, 1946 D. U. Mar. 15, 1946
"MAMZELL"—IV—M—513,018
Gottlieb Bass (Sapo Elixir Chemical Co.), St. Louis, Mo.
Ser. Nov. 22, 1946 D. U. May 1, 1945
MAQUILLAGE—VI—ABCH—512,896
Coty, Inc., New York, N. Y.
Ser. Nov. 20, 1946 D. U. Nov. 14, 1946
MARRAKECH—VI—B—510,961
Lancome, S. A., Paris, France
Ser. Oct. 16, 1946 D. U. July 27, 1942
MAZE-U (and des.)—VI—M—497,712
Joseph A. Haddad (Dewike Lab.), Toledo, Ohio
Ser. Mar. 6, 1946 D. U. Oct. 1945
MELTONIAN—IV—M—507,989
Meltonian, E. Brown & Son, Ltd., London, England
Ser. Aug. 24, 1946 D. U. 1940
MENAGEN—VI—M—507,748
Parke, Davis & Company, Detroit, Mich.
Ser. Aug. 21, 1946 D. U. July 19, 1946
MERALUZ—VI—H—521,179
Maria B. Diaz, New York, N. Y.
Ser. Apr. 23, 1947 D. U. Jan. 15, 1947
MERCURIBEN—VI—K—514,700
Perry A. Foote, Gainesville, Fla.
Ser. Dec. 23, 1946 D. U. Apr. 16, 1946
MERIDEX—VI—H—525,686
Royal Pharmacal Corp., Brooklyn, N. Y.
Ser. July 2, 1947 D. U. Apr. 23, 1947
MERRIMENT—VI—CE—512,044
Avon Products, Inc., New York, N. Y.
Ser. Nov. 5, 1946 D. U. Oct. 17, 1946
MODEL—IV—M—514,488
Frederic H. Penn (Catolite Company), Dallas, Tex.
Ser. Dec. 18, 1946 D. U. June 3, 1946
MODEL'S RED—VI—C—510,315
Gibbs & Company, Chicago, Ill.
Ser. Oct. 5, 1946 D. U. Apr. 10, 1941
MON FAIBLE—VI—BC—520,015
Fernand Capelle, Seine, France
Ser. Apr. 2, 1947 D. U. Feb. 13, 1936
MONCLAIR—VI—BCH—524,371
Leon Bellon, Garches, France
Ser. June 18, 1947 D. U. Sept. 29, 1945
MOONSTRUCK—VI—CE—522,213
Barbara Gould, Inc., New York, N. Y.
Ser. May 10, 1947 D. U. Apr. 28 1947

N L—VI—T—517,746
Andrew Apiros, Hot Springs, Ark.
Ser. Feb. 18, 1947 D. U. Nov. 15, 1946
NEO GERMOLYPTUS—VI—T—514,485
Midland Labs., Dubuque, Iowa
Ser. Dec. 18, 1946 D. U. Apr. 12, 1938
NITROTAN—VI—M—516,827
The Cramer Chemical Company, Gardner, Kansas
Ser. Feb. 3, 1947 D. U. January 1935
NOBLESSE—VI—ABC—523,915
Jerome F. May, Asbury Park, N. J.
Ser. June 10, 1947 D. U. Nov. 21, 1939
NORTH SHORE—VI—B—520,228
The N. Y. Grande Maison de Blanc Corp., New York, N. Y.
Ser. Apr. 5, 1947 D. U. Jan. 20, 1947
NOTT'S (and des.)—VI—T—510,389
Robert H. Harkins (Nott Mfg. Co.), Mt. Vernon, N. Y.
Ser. Oct. 7, 1946 D. U. Apr. 11, 1946
NOW—VI—BCE—519,570
Consolidated Cosmetics, Chicago, Ill.
Ser. Mar. 26, 1947 D. U. Mar. 14, 1947
NUIT DES ROIS—VI—BCH—513,318
Juliette Adolphine De Ray, Neuilly-Sur-Seine, France
Ser. Nov. 27, 1946 D. U. Mar. 25, 1943
NUSHAVE—VI—I—501,669
The Andrew Jergens Co., Cincinnati, Ohio
Ser. May 8, 1946 D. U. Apr. 3, 1946

OCTA-KLOR—VI—T—520,812
Julius Hyman & Co. Denver, Colo.
Ser. Apr. 16, 1947 D. U. Mar. 15, 1947
OLIVER GOLDSMITH—VI—T—508,216
Oliver Goldsmith (Oliver Goldsmith Exterminating Co.), Waco, Tex.
Ser. Aug. 29, 1946 D. U. July 10, 1946
ON LEAVE—VI—B—500,962
Kay Daumit, Inc., Chicago, Ill.
Ser. Apr. 26, 1946 D. U. Jan. 10, 1942
ORBISCIDE—VI—T—524,411
Orbis Products Corp., New York, N. Y.
Ser. June 18, 1947 D. U. Nov. 25, 1946
ORGEUIL—VI—B—512,271
Lucien Lelong, Inc., Chicago, Ill.
Ser. Nov. 8, 1946 D. U. Oct. 10, 1946
ORMONT—VI—CDHKT—511,104
Ormont Drug & Chemical Co., Inc., Long Island City, N. Y.
Ser. Oct. 18, 1946 D. U. 1930
ORTHENE—VI—T—518,750
California Spray-Chemical Corp., Wilmington, Del.
Ser. Mar. 10, 1947 D. U. Feb. 7, 1947

PADDY—VI—BC—511,757
Parfums Verchere (Parfums Jerome), S. A. R. L. Paris, France
Ser. Oct. 30, 1946 D. U. Mar. 21, 1945
PAN PEACH SPRAY—VI—T—525,052
Woolfolk Chemical Works, Ltd., Fort Valley, Ga.
Ser. June 27, 1947 D. U. May 1932
PARFORCE—VI—BC—508,259
Biro, Meyne & Biro, Inc., New York, N. Y.
Ser. Aug. 30, 1946 D. U. Aug. 8, 1946
PATHETIQUE—VI—BC—508,260
Biro, Meyne & Biro, Inc., New York, N. Y.
Ser. Aug. 30, 1946 D. U. Aug. 8, 1946
PED-EASE—VI—T—502,209
Harry L. Goldwag (Pe-i-Ease Labs.), New York, N. Y.
Ser. May 16, 1947 D. U. April 1935
PENCO—VI—T—491,428
The Penn. Salt Mfg. Co., Philadelphia, Pa.
Ser. Nov. 10, 1945 D. U. Mar. 19, 1945
PENPHENE—VI—T—521,402
The Penn. Salt Mfg. Co., Philadelphia, Pa.
Ser. Apr. 26, 1947 D. U. Mar. 25, 1947
PERCLOGNE—VI—B—521,642
Dermetics, Inc., New York, N. Y.
Ser. May 1, 1947 D. U. Jan. 29, 1947
PER-DE-CO—VI—K—525,102
Per-De-Co Limited, Farnham, England
Ser. June 28, 1947 D. U. 1942
PHYLLETS—VI—K—508,235
National Agrol Co., Washington, D. C.
Ser. Aug. 29, 1946 D. U. July 16, 1946
PHYSICIANS' AND SURGEONS'—IV—A—506,481
John W. Steube (The Physicians Supply Co.), Cincinnati, Ohio
Ser. July 29, 1946 D. U. 1885 (Under 10-yr. proviso.)
PING—VI—T—518,303
McKesson & Robbins, Inc., New York, N. Y.
Ser. Feb. 28, 1947 D. U. Feb. 26, 1947
PINK MIST—VI—E—511,532
Elizabeth Arden Sales Corp., New York, N. Y.
Ser. Oct. 26, 1946 D. U. Oct. 8, 1946
PIPE DREAM—VI—I—510,995
Avon Products, Inc., New York, N. Y.
Ser. Oct. 17, 1946 D. U. Oct. 3, 1946
PRAIRIE FIRE—VI—C—513,721
Dermatics, Inc., New York, N. Y.
Ser. Dec. 5, 1946 D. U. Nov. 5, 1945
PREDICTION—VI—B—514,201
Richard Hudnut, New York, N. Y.
Ser. Dec. 13, 1946 D. U. Nov. 22, 1946
PRIORITY—VI—BC—523,198
Les Parfums de Dana, Inc., New York, N. Y.
Ser. May 28, 1947 D. U. May 1, 1947
PROFILE—VI—BC—522,324
Elizabeth Arden Sales Corp., New York, N. Y.
Ser. May 13, 1947 D. U. Apr. 15, 1945
PUNCH 'N JUDY—VI—K—507,669
Albert Bassell, Inc., Arsdley, N. Y.
Ser. Aug. 20, 1946 D. U. Aug. 16, 1946
PYROCIDE MULTICIDE (and des.)—VI—T—522,975
McLaughlin Gormley King Co., Minneapolis, Minn.
Ser. May 24, 1947 D. U. Apr. 17, 1947

Q D—VI—T—523,020
John Powell & Co., Inc., New York, N. Y.
Ser. May 26, 1947 D. U. Mar. 31, 1947
QUENSO—VI—K—514,429

The Quenso Co., Inc., New York, N. Y.
Ser. Dec. 17, 1946 D. U. Oct. 1, 1942

R. P. N. (and des.)—VI—T—515,894
R. P. Nixon, Deport, Tex.
Ser. Jan. 17, 1947 D. U. December 1946
RAMSHEAD—VI—H—512,020
Rodney S. Rose (Lanolin Co. of America), Los Angeles, Calif.
Ser. Nov. 4, 1946 D. U. Oct. 23, 1946
RANCH BRANDS—VI—I—509,115
M. C. Wentz (M. C. Wentz Co.), Pasadena, Calif.
Ser. Sept. 14, 1946 D. U. Aug. 26, 1946
RAPIER—VI—C—517,770
Botany Worsted Mills, Passaic, N. J.
Ser. Feb. 19, 1947 D. U. Feb. 3, 1947
RAPITOX—VI—T—514,035
Hercules Powder Company, Wilmington, Del.
Ser. Dec. 11, 1946 D. U. Nov. 8, 1946
RECEPTION—VI—C—512,045
Avon Products, Inc., New York, N. Y.
Ser. Nov. 5, 1946 D. U. Oct. 21, 1946
RED TAG—VI—CE—511,260
Avon Products, Inc., New York, N. Y.
Ser. Oct. 22, 1946 D. U. Oct. 3, 1946
RELAX-O—VI—G—514,849
Relax-O Co., Chicago, Ill.
Ser. Dec. 26, 1946 D. U. Nov. 18, 1946
RONSARD MEXICALI—VI—B—497,241
Julius Guckenheimer (Ronsard Perfumers), New York, N. Y.
Ser. Feb. 26, 1946 D. U. May 1945
RONSARD VIEUX PARIS—VI—B—497,242
Julius Guckenheimer, (Ronsard Perfumers), New York, N. Y.
Ser. Feb. 26, 1946 D. U. May 1945
ROSY MORN—VI—CE—507,092
Avon Products, New York, N. Y.
Ser. Aug. 9, 1946 D. U. July 1940
RUTAMEN—VI—M—519,414
Frank Parlatore, Long Island City, N. Y.
Ser. Mar. 21, 1947 D. U. July 15, 1946

SA-SO-MA—VI—K—522,342
John P. Douglas (The Douglas Mfg. Co.), Washington, D. C.
Ser. May 13, 1947 D. U. April 1940
SABANE—VI—T—519,790
Woolfolk Chemical Works, Ltd., Fort Valley, Ga.
Ser. Mar. 28, 1947 D. U. Oct. 1946
SACRIFICE—VI—B—516,191
Irresistible, Inc., New York, N. Y.
Ser. Jan. 23, 1947 D. U. Dec. 13, 1946
SALACOL—VI—M—512,571
Blue Ridge Labs., Clemson, S. C.
Ser. Nov. 14, 1946 D. U. Sept. 17, 1946
SAN PHENO—VI—M—520,702
Huntington Laboratories, Inc., Huntington, Ind.
Ser. Apr. 15, 1947 D. U. Dec. 15, 1931
SASSAFROL—VI—CK—515,694
Fritzsche Brothers, Inc., New York, N. Y.
Ser. July 16, 1946 D. U. July 1, 1946
SED—VI—C—523,865
Sed, Inc., St. Louis, Mo.
Ser. June 11, 1947 D. U. Apr. 8, 1947
SEDUIRE—VI—C—521,770
Union Products Co, Cherry Valley, Ill.
Ser. May 2, 1947 D. U. Mar. 1, 1947
SELENE—IV—C—502,340
Theodore Spector, Philadelphia, Pa.
Ser. May 17, 1946 D. U. May 15, 1946
SIR BARTONS—VI—I—499,733 (and des.)
Sir Barton's Inc., Brooklyn, N. Y.
Ser. Apr. 5, 1946 D. U. Jan. 15, 1946
Reg. 432,728 Sept. 9, 1947
SIRENA—VI—H—511,234
Noramex Company, New York, N. Y.
Ser. Oct. 21, 1946 D. U. Aug. 20, 1946
SOCAL—VI—M—518,790
Standard Oil Company of Calif., Wilmington, Del.
Ser. Mar. 10, 1947 D. U. November 1934
SPUMOL—VI—A—511,233
Noramex Company, New York, N. Y.
Ser. Oct. 21, 1946 D. U. Aug. 20, 1946
SQUEEK—IV—M—491,471
Finger Lakes Chemical Co., Ithaca and Etna, N. Y.
Ser. Nov. 13, 1945 D. U. June 29, 1940
STANOLIND—VI—T—525,128
Standard Oil Company, Whiting, Ind.
Ser. June 28, 1947 D. U. Nov. 19, 1936
STAR OF INDIA—VI—B—511,582
Gloria Vanderbilt Corp., New York, N. Y.
Ser. Oct. 26, 1946 D. U. Oct. 23, 1946
STAT—VI—M—514,453
James T. Weeks (Weeks Labs.), Jackson, Miss.
Ser. Dec. 17, 1947 D. U. Oct. 1946
STEROX—VI—T—520,760
Monsanto Chemical Company, St. Louis, Mo.
Ser. Apr. 15, 1947 D. U. Feb. 24, 1947
SUE PREE—VI—ABCDHI—472,128
Superior Products Company (S-P Labs.), Dallas, Tex.
Ser. July 11, 1944 D. U. May 30, 1928
SUMMER ROSE—VI—CE—420,537
Avon Products, Inc., New York, N. Y.
Ser. Apr. 10, 1947 D. U. Mar. 27, 1947
SUR DEUX NOTES—VI—BC—521,760
S. A. Renaud Paris 1817, Seine, France
Ser. May 2, 1947 D. U. Nov. 26, 1940
SWANKY—VI—T—497,975
Harry Shapiro (Chemical Specialties Co.), New York, N. Y.
Ser. Mar. 9, 1946 D. U. May 1934
SYMPATHY—VI—BC—508,261
Biro, Meynes & Biro, Inc., New York, N. Y.
Ser. Aug. 30, 1946 D. U. Aug. 8, 1946
SYNTACLO—VI—M—518,361
The E. L. Patch Company, Stoneham, Mass.
Ser. Mar. 1, 1947 D. U. Sept. 1946

T-S-O—VI—M—522,004
Alex N. Macks (Tri-State Chemical Co.), Buffalo, N. Y.
Ser. May 7, 1947 D. U. Jan. 30, 1947
TACT—VI—ABCDHI—517,194
J. G. Morris, (The Morris System Labs.), Omaha, Nebr.
Ser. Feb. 8, 1947 D. U. Dec. 1, 1946
TAL-CAMP—IV—A—514,145
Tal-Camp Soap Company, Lafayette, La.
Ser. Dec. 12, 1946 D. U. Oct. 1, 1946
TAMBOR—VI—ABC—523,916
Jerome F. May, Asbury Park, N. J.
Ser. June 10, 1947 D. U. Nov. 21, 1939
TENDRE ESPOIR—VI—B—506,100
Jean d'Hennery, Inc., New York, N. Y.
Ser. July 23, 1946 D. U. May 8, 1946
TENSITE—VI—T—515,022
Cenol Company, Chicago, Ill.
Ser. Dec. 30, 1946 D. U. Dec. 2, 1946
THREE TO MAKE READY—VI—C—512,695
Pond's Extract Company, New York, N. Y.
Ser. Nov. 15, 1946 D. U. Oct. 18, 1946
"TIMELY ESSENCE"—VI—B—514,879
Lou Appleton, New York, N. Y.
Ser. Dec. 27, 1946 D. U. Dec. 17, 1946
TIPSY—VI—B—519,649
Gourielli, Inc., New York, N. Y.
Ser. Mar. 27, 1947 D. U. Feb. 15, 1947
TOAST—VI—BC—511,758
Parfums Verchere (Parfums Jerome), S. A. R. L., Paris, France
Ser. Oct. 30, 1946 D. U. Mar. 20, 1945
TRES BIEN—VI—ABCEHK—519,095
Roger Thirion & Cie, Paris, France
Ser. Mar. 15, 1947 D. U. Nov. 29, 1943
TRES FRANCAIS—VI—BC—509,208
Germaine Rene Duval, (Parfums Volnay), Suresnes, France
Ser. Sept. 17, 1946 D. U. May 1937
TROPICAL MAGIC—VI—B—513,081
The J. R. Watkins Co., Winona, Minn.
Ser. Nov. 22, 1946 D. U. Mar. 3, 1926
TRYDECYL—VI—T—518,362
The E. L. Patch Company, Stonheam, Mass.
Ser. Mar. 1, 1947 D. U. June 1946
TSUNAMI—VI—BCI—512,822
De Marguerie, Inc., New York, N. Y.
Ser. Nov. 19, 1946 D. U. Mar. 20, 1946
TUMULTES—VI—B—515,313
Etablissements Rigaud, Inc., New York, N. Y.
Ser. Jan. 6, 1947 D. U. Dec. 31, 1946
TYOL—VI—M—514,487
Frederic H. Penn, (Catolite Company), Dallas, Tex.
Ser. Dec. 18, 1946 D. U. Sept. 10, 1946
TYPSEY—VI—B—519,647
Gourielli, Inc., New York, N. Y.
Ser. Mar. 27, 1947 D. U. Feb. 15, 1947

UNDENATE—VI—T—525,257
Albert Seiler, (Ermah Drug Co.), New York, N. Y.
Ser. June 30, 1947 D. U. March 1947

VAL-COL (and des.)—VI—H—522,796
Frances Bleach Mike, Newark, N. J.
Ser. May 22, 1946 D. U. Nov. 7, 1946
VANCIDE—VI—T—522,505

R. T. Vanderbilt, Co., Inc., New York, N. Y.
Ser. May 16, 1947 D. U. May 1, 1947
VAQUERO—VI—I—509,116
M. C. Wentz (M. C. Wentz Co.), Pasadena, Calif.
Ser. Sept. 14, 1946 D. U. Aug. 26, 1946
VELSICOL 1068 (and des.)—VI—T—518,574
Velsicol Corporation, Chicago, Ill.
Ser. Mar. 5, 1947 D. U. Feb. 11, 1947
VERDOL—VI—T—525,130
Standard Oil Company, Whiting, Ind.
Ser. June 28, 1947 D. U. Feb. 9, 1929
VERI-FIDE (and des.)—VI—HKM—519,557
Edward Ackerman, Hewlett, Long Island, N. Y.
Ser. Mar. 26, 1947 D. U. 1941
VERSA-TOL—VI—T—524,440
Andrew Wilson, Inc., Springfield, N. J.
Ser. June 19, 1947 D. U. Jan. 1947
VITALONG—VI—BCE—516,270
Andre Goldfard, Paris, France
Ser. Jan. 24, 1947 D. U. July 25, 1946
VITRESAN—VI—T—522,564
Economics Laboratory, Inc., St. Paul, Minn.
Ser. May 17, 1947 D. U. Aug. 1, 1946
VOICE-O-SCOPE—VI—C—514,039
Richard Hudnut, New York, N. Y.
Ser. Dec. 11, 1946 D. U. Nov. 21, 1946
VOLONTIERS—VI—BC—521,021
Raphael Lopez, Paris, France
Ser. Apr. 29, 1947 D. U. Mar. 15, 1946
VOTOL—VI—T—524,840
Waltham Chemical Co., Waltham, Mass.
Ser. June 25, 1947 D. U. June 5, 1947

WALDORF INSTANT—IV—A—506,320
Sydney R. Jacobs, (General Products), Chicago, Ill.
Ser. July 26, 1946 D. U. Dec. 7, 1945
Reg. 432,327 Aug. 26, 1947
WALL STREET—VI—B—514,220
Michel Pasquier, New York, N. Y.
Ser. Dec. 13, 1946 D. U. Aug. 1939
WAYFARER—VI—BC—518,916
Olive Smith, Chicago, Ill.
Ser. Mar. 12, 1947 D. U. Mar. 3, 1947
WHEN KNIGHTS WERE BOLD—IV—I—512,738 (and des.)
Gourielli, Inc., New York, N. Y.
Ser. Nov. 16, 1946 D. U. Apr. 5, 1945
WHISK—IV—A—520,915
Whisk Co. of New York, Inc., New York, N. Y.
Ser. Apr. 17, 1947 D. U. July 1, 1928
WHISK—IV—A—508,019
The Bay Chemical Co., Inc., Bay City, Mich.
Ser. Aug. 26, 1946 D. U. July 2, 1946
WHITE LIE—VI—B—521,694
Joseph W. Simoneau, (J. W. Simoneau & Sons & White Mt. Parfumers), Nashua, N. H.
Ser. May 1, 1947 D. U. Apr. 2, 1947
WISH CHEST—VI—BC—516,756
Avon Products, Inc., New York, N. Y.
Ser. Feb. 1, 1947 D. U. Jan. 20, 1947

The Trade-Marks listed here are dated September 23, 1947 through October 14, 1947, inclusive.

NO. 71—VI—BC—513,289
Biro, Meyne & Biro, Inc., New York, N. Y.
Ser. Nov. 27, 1946 D. U. Nov. 6, 1946
NO. 72—VI—BC—513,290
Biro, Meyne & Biro, Inc., New York, N. Y.
Ser. Nov. 27, 1946 D. U. Nov. 6, 1946
NO. 73—VI—BC—513,291
Biro, Meyne & Biro, Inc., New York, N. Y.
Ser. Nov. 27, 1946 D. U. Nov. 6, 1946
NO. 74—VI—BC—513,292
Biro, Meyne & Biro, Inc., New York, N. Y.
Ser. Nov. 27, 1946 D. U. Nov. 6, 1946
NO. 75—VI—BC—513,293
Biro, Meyne & Biro, Inc., New York, N. Y.
Ser. Nov. 27, 1946 D. U. Nov. 6, 1946

AGELESS—VI—CH—524,594
Dermetics, Inc., New York, N. Y.
Ser. June 21, 1947 D. U. May 20, 1947
ALECO—IV—M—510,244
A. L. Engelhardt Company, Los Angeles, Calif.
Ser. Oct. 4, 1946 D. U. Sept. 26, 1945

ANSER—IV—M—522,244
Clorox Company, Oakland, Calif.
Ser. May 12, 1947 D. U. May 23, 1946
ALAMASK—VI—T—511,733
E. I. Du Pont de Nemours and Company, Wilmington, Del.
Ser. Oct. 30, 1946 D. U. Aug. 30, 1946
ARWITE—IV—A—517,446
Affiliated Retailers, Inc., New York, N. Y.
Ser. Feb. 14, 1947 D. U. Sept. 15, 1946
AWARD—IV—I—522,438
Colgate-Palmolive-Peet Company, Jersey City, N. J.
Ser. May 15, 1947 D. U. May 10, 1947

BALAIZA—VI—B—512,270
Lucien Lelong, Inc., Chicago, Ill.
Ser. Nov. 8, 1946 D. U. Mar. 11, 1946
BB LAN-O-LAY—VI—H—516,814
Hal Collins Company, Dallas, Texas
Ser. Feb. 3, 1947 D. U. Aug. 19, 1946
BERICE—VI—C—525,849
House of Berice, New York, N. Y.
Ser. July 3, 1947 D. U. Aug. 6, 1946

CINDERELLA—IV—M—522,075
Cameo, Inc., Toledo, Ohio
Ser. May 8, 1947 D. U. Apr. 11, 1947
COPY-PLUS—IV—A—518,662
Copy-Plus, Inc., Milwaukee, Wis.
Ser. Mar. 7, 1947 D. U. Jan. 22, 1947
CROSS COUNTRY—IV—AI—510,186
Mark Cross Company, New York, N. Y.
Ser. Oct. 3, 1946 D. U. January 1946
CULICIDE—VI—T—512,348
Socony-Vacuum Oil Company, Inc., New York, N. Y.
Ser. Nov. 9, 1946 D. U. Apr. 4, 1945

DAWAMESK—VI—BC—505,823
Guerlain, Inc., New York, N. Y.
Ser. July 18, 1946 D. U. July 10, 1946
DEB BLUSH—VI—CM—521,639
Dermetics, Inc., New York, N. Y.
Ser. May 1, 1947 D. U. Nov. 22, 1946
DEEP IN CLOVER—VI—BC—519,309
Avon Products, Inc., New York, N. Y.
Ser. Mar. 20, 1947 D. U. Feb. 14, 1947
DERMAID—VI—T—511,513
Robert S. Sutton (The Vivian Co.), San Antonio, Tex.
Ser. Oct. 25, 1946 D. U. Aug. 16, 1946
DISTRACTING—VI—BCEH—520,093
Consolidated Cosmetics, Chicago, Ill.
Ser. Apr. 3, 1947 D. U. Mar. 14, 1947

ELAIN TIBET—VI—M—502,282
Florasynth Laboratories, Inc., New York, N. Y.
Ser. May 17, 1946 D. U. December 1944
Reg. 433,146 Sept. 23, 1947
ENNOBLIDE—VI—M—526,210
Esrolko Incorp., New York, N. Y.
Ser. July 4, 1947 D. U. Sept. 1946
ESPOIR—IV—A—519,434
Antoine de Paris, Inc., New York, N. Y.
Ser. Mar. 22, 1947 D. U. Mar. 12, 1947
EUGOL—VI—H—465,539
William T. Logue, Cumberland, Md.
Ser. Dec. 6, 1943 D. U. Sept. 27, 1927
EUPHORIE—VI—BC—519,278
Elizabeth Le Merdy, Vincennes, France
Ser. Mar. 19, 1947 D. U. Nov. 12, 1941
EXTRA DRY—VI—D—489,728
Ever-Dry Corp., Los Angeles, Calif.
Ser. Oct. 10, 1945 D. U. Nov. 17, 1941
Reg. 433,529 Oct. 14, 1947

FLIT—VI—T—512,719
Stanco Inc., New York, N. Y.
Ser. Nov. 15, 1946 D. U. Mar. 28, 1946
FORMULA 51-X—VI—H—519,462
Joseph Cianfarini (Associated Labs.), Rodeo, Calif.
Ser. Mar. 24, 1947 D. U. Jan. 15, 1947
FRAGRANCE FOUNTAINE—VI—BC—508,263
Biro, Meyne & Biro, Inc., New York, N. Y.
Ser. Aug. 30, 1946 D. U. Aug. 8, 1946

GAMBLE'S SCIENTIFIC—VI—BCH—520,780
Elsie Gamble, Montclair, N. Y.
Ser. Apr. 1, 1947 D. U. May 1, 1929
Reg. 433,279 Sept. 30, 1947

(Continued on page 708)

KOMMON SCENTS!

Charles Luckman, as head of the President's Food Control Committee, is a tribute to the Toilet Goods Industry. And a definite denial that all Truman's plans wind up "no soap."

•

The job will have more interference than *Sid* Luckman ever got while playing quarterback for Columbia. And even tougher opposition.

•

Unfortunately, "voluntary," to too many people, means prescribing a sacrifice for the other fellow. One gentleman whom we used to regard as a friend thinks rationing means doing without the things he can't afford to buy in the first place.

•

Without prejudice to the merit of the President's intentions or Mr. Luckman's willingness, it seems to us that voluntary rationing as a substitute for price control is just about as effective as homicide for birth control.

•

Reminds us of a client we never got. New in the business, he protested when informed that containers are the most expensive part of lipsticks. When, kiddingly, we told him we could make lipsticks without containers, he beamed. We recommended a pair of gloves with each lipstick.

•

The nation may accept meatless Tuesday and wheatless Thursday but never heatless Saturday nites. At least that would seem to be the reasoning of the liquor industry.

•

Unromantic as it might seem, the effort to provide more eggs for war-torn Europe is a greater strain on the chicken than the consumer. Or, more briefly, the chicken continues to get it in the end.

•

Voluntary rationing has only one weakness. While each of us is urged to do his part, there's always one cynic who'd rather do you instead.

•!

At last we know why the Cosmetic field considers itself related to several industries. You've gotta be somebody's relative to get into it.

George Fiedler

KELTON

Cosmetic Company

230 West 17th Street
New York 11, N. Y.

763 So. Los Angeles Street
Los Angeles 14, Calif.

Private Label Manufacturers Exclusively
Covered by Product Liability Insurance

Fluorine and Teeth

(Continued from page 613)

from Lake Michigan will show: (a) About six times as many children showing no dental caries experience (caries-free), (b) about a 60 per cent lower dental caries experience rate, (c) about a 70 per cent reduction in Bodecker's caries index, (d) almost a 75 per cent decrease in first permanent molar loss, and (e) approximately 95 per cent less caries on the proximal surfaces of the four upper incisons.

A note of caution to temper the over-enthusiastic has been voiced by Boyd and Cheyne.[34] They stressed that there is no need to conclude from studies thus far reported that teeth undergo decay primarily because of the inadequacy of fluoride ingestion, or because of lack of fluorine in the structure of the tooth.

Should the fluorination of public water supplies work out as is hoped, it has been estimated that only two-thirds of the population to whom such supplies would be available would be benefited. For the other one-third, the topical application of fluoride would probably supply an effective substitute.[2] There is a growing volume of evidence,[19-35-38] most of it obtained under well-controlled conditions, that the application of various fluoride solutions to children's teeth at suitable intervals results in marked reductions in the occurrence of dental caries. Toxicological studies[39] on such direct fluoride applications indicate that there is no systemic absorption when the compound is properly used.

Bibby,[40] an authority in this phase of caries-prevention, has recently pointed out that when sodium fluoride is applied several times a year to tooth surfaces which have been cleaned, there is a reduction in decay of from one-third to one-half. Increasing evidence shows that fluoride applications are most effective when applied to the surfaces of newly-erupted teeth. There are indications that some sort of frictional contact with the tooth surface may improve some benefits. Incorporating fluorides in cleansing mixtures confers some benefits, but better results are obtained if the applications are made after a thorough prophylaxis.

The number of applications, the most effective concentration of fluoride, and the duration of protective effect require further study.[47] The work of Jordan and his associates[42] appears to indicate that maximum results from the topical application of a 2 per cent sodium fluoride are obtained with four or more, but fewer than eight treatments. As noted by the Council on Dental Therapeutics,[43] although the optimum concentration of fluorine is not known, most of the available evidence is associated with multiple application of 2 per cent aqueous sodium fluoride solutions preceded by oral prophylaxis.

A much higher proportion of sodium fluoride was used by the Russian worker, Lukomski,[44] in his studies of 188 school children. In this work, the right molars were treated for one to two minutes with 75 per cent sodium fluoride in a glycerine base. The left, untreated

molars served as controls. Of the 376 teeth studied, only one tooth in group given three treatments was found to be carious, while 35 carious lesions were seen in the controls.

The possibility of using fluorides in mouth washes has not, of course, gone unnoticed. Examination[45] of two people who had used a 1:1,000 solution of sodium fluoride as a mouth wash showed that the gingival were nearly normal or at least not unduly irritated. Atkins[46] has suggested the use of a wash containing 5 p.p.m. of sodium fluoride as a practical means of caries control. The teeth are cleaned immediately after eating and then the mouth is rinsed several times with the fluoride mouth wash.

Jay,[25] however, feels that it is not likely that a sodium fluoride mouth wash will cause a significant reduction in caries activity. In his opinion, the published data does not provide convincing evidence that sodium fluoride in a mouth wash is beneficial. Bolstering this view are investigations which showed that no beneficial results followed the use of a 1:1,000 fluoride mouth wash three times per week.[47]

Also controversial is the value of incorporating fluorides in dentifrices. In experiments carried out by McClendon and Carpousis,[48] a group of men were examined for dental caries at the beginning and end of a one-year period. Forty of these men were given powdered fluorapatite, containing nearly 40 per cent fluorine, to brush their teeth daily; 80 others were used as controls. Examination showed that those using fluorapatite developed an average of 0.5 new cavities per man per years, while the controls developed 1.5 cavities per man during the same time.

Using accelerated laboratory methods, Bibby[49] set out to determine whether there would be any advantage in combining fluorides with materials of the type commonly used in dentifrices, mouth washes and prophylactic mixtures. To this end, enough sodium fluoride to make 0.1 per cent solution was added to filtrates of slurries of a variety of products, including various common dentifrice ingredients like calcium phosphate, sodium carbonate, calcium carbonate, dicalcium phosphate, magnesium carbonate and talc. These mixtures, as well as the fluoride-free filtrate controls, were used to carry out enamel solubility tests. It was found that while the fluoride-containing mixtures were able to reduce enamel solubility by from 8 to 30 per cent, in almost all cases these values were less than those given by a simple aqueous 0.1 per cent sodium fluoride solution.

Pertinent in this connection is the statement made by McClure,[50] of the U. S. Public Health Service's National Institute of Health, at the 1947 meeting of the American Dental Association. He said that fluorinated tooth pastes, toothpowders and mouthwashes have not proved effective in controlling decay.

Also militating against the indiscriminate use of fluorides in dentifrices and mouthwashes is the fact that fluorides are toxic. Ast[51] has warned that, "Sodium fluoride is a highly toxic substance, and while its

ammonium thioglycolate

by STANTON

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application in safe concentrations, under strict control by competent personnel, may prove to be a useful therapeutic agent, under other circumstances it may be definitely harmful."

Oral ingestion of fluorides, in tablets or capsules, has been suggested as another means of providing adequate amounts of the element for caries control. Animal experiments have indicated that oral ingestion of fluoride will inhibit dental caries in the rat. As previously noted however, this evidence is not especially applicable to caries in man.

More indicative perhaps is the work done by Strean and Beaudet[52] with two groups of children. Ordinarily, children not receiving fluorine in their water or food may expect an average increase of 40 to 65 per cent in the incidence of dental caries. When tablets containing 3 mg. of calcium fluoride were given daily to children for a six-month period, the caries increase was reduced to 27 per cent. When 30 mg. of ascorbic acid and 400 units of vitamin D was added to the calcium fluoride, the caries-incidence was further reduced to 24 per cent. In the second series, which ran two months longer, the increase dropped to 10 per cent as compared to the 24 per cent in the first trials.

These workers suggest that this decrease may be explained by a synergistic action between vitamins C and D and fluorine. They feel that fluorine combined with vitamins C and D offers a means of controlling the amount of fluorine to be ingested.

Following this report, a number of commercial preparations have been offered to the dental profession as dietary supplements in the control of dental caries. These generally contain calcium fluoride reinforced with one or more vitamins. Official sources[29] remain skeptical of the efficacy of such products, and authorities[50, 53] have warned that their improper use may lead to fluorosis or kidney troubles. Cognizance of these dangers has led manufacturers of these tablets to issue the caution that where the fluorine content of the water supply exceeds 0.3 p.p.m., the daily use of such products is definitely contraindicated.

Serving a similar purpose is the suggestion[1] that bone meal be given to supply fluorine for the systemic control of dental caries. Offering a more natural and safer approach to the problem, the use of clean, edible bone meal is said to provide an "ideal" preparation for meeting the requirements for a combined calcium-phosphorus-fluorine mineral supplement, systematically ingested as a food and not as a drug. Products based on this principle have been placed on the market, but official sources[29] and students[25] of the subject remain dubious of their efficacy.

While on this phase of the subject, attention should be called to the work of Restarski and his associates.[54] Noting that acids are responsible in large measure for caries formation, they pointed to the increased ingestion of citrus fruits, acidified candies and soft drinks. With these observations in mind they started a series of experiments on animals. They found that severe destruction of the enamel was produced by allowing

the animals to drink a popular soft beverage for periods of five days or more. The inclusion of 1 to 20 parts of fluorine (as sodium fluoride) in the acid beverage decreased, but did not completely prevent the destruction of enamel in the majority of the animals.

The Russian worker, Lukomski[28] has suggested broad therapeutic uses for fluorides. Very interesting, for example, is his use of fluorine internally for the treatment of pyorrhea alveolaris. The therapy consists of administering a 1.0 per cent solution of sodium fluoride at a rate of five drops a day for approximately three weeks. This is said to be especially indicated in periodental conditions characterized by the presence of gingivitis and progressive alveolar atrophy. Observation or several hundred cases indicates that this measure is especially effective where there is only mild or moderate loosening of the teeth. In these instances, it is reported that the teeth tend to become firm, chewing is improved, inflammation disappears or is decreased, bleeding tendency is reduced and no signs of chronic fluorine intoxication are seen.

Lukomski has also used sodium fluoride in the recalcification of softened dentin in a large number of cases. This has been accomplished by sealing a 0.7 per cent sodium fluoride preparation on the floor of the carious cavity. Follow-up studies have revealed a hardening of the dentin and arrest of the caries process without the development of pulpal pathology. Gangrenous or pathological root canals have been treated with cotton wicks containing 0.7 per cent of sodium fluoride. These are left in the pulp chamber for two days and the treatment is usually repeated three to five times. The pulpal canal so treated may be filled with a paste containing 0.7 per cent of sodium fluoride with enough added bismuth to make the preparation radio-opaque.

Following remineralization studies on teeth, American workers[55] have also suggested that fluoride-Calcium treatments may be very effective in reducing corrosion of dentin and, more important, might be employed to arrest caries and produce a partial restoration within the cavities. Such treatment of deep cavities, they felt, might be valuable prior to the insertion of a filling material. In their work decalcified surfaces of dentin were remineralized by treatment with a calcium salt after preliminary treatment with a sodium fluoride solution. Such remineralized surfaces were found to have increased resistance to solubilizing influences.

Of related interest is Lukomski's suggestion that fluoride therapy may be indicated in the implantation, replantation and transplantation of teeth. Such technics have fallen into disuse because the teeth generally undergo considerable resorption. The Russian worker feels that it is reasonable to believe that immersion of teeth in fluoride solutions prior to operation might overcome this difficulty.

Lukomski is perhaps best known for introducing a fluoride paste as an obtundent for hypersensitive dentin.[56] This desensitizing paste consists of a mixture of equal parts of sodium fluoride, white clay, and glycerine.

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The efficacy of this desensitizing treatment has been confirmed by American workers[57] and it has received wide acceptance[47, 58, 59, 60] as an effective measure. As now standarized, the treatment consists of applying to the sensitive area a pledget of cotton moistened with a 4 per cent solution of sodium fluoride. This is followed by application of a small amount of the fluoride-clay, glycerine paste, which is rubbed vigorously into the surface. Usually, one treatment suffices, but repeated application can be made if necessary. Relief from sensitivity and pain lasts, as a rule, from six months to a year or longer. The treatment has proved a great boom in cavity preparation and similar dental work.

BIBLIOGRAPHY

1. Branson, C. B.: J.A.D.A. 31: 71, 1944.
2. Bellinger, W. R.: J.A.D.A. 34:719, 1947.
3. Smith, M., Lantz, E. & Smith, H. V.: Science 74:244, 1931.
4. Churchill, H. V.: Ind. & Eng. Chem. 23:906, 1931.
5. McKay, F. S.: J.A.D.A. 15:1429, 1928.
6. Armstrong, W. D. & Brekhus, P. J.: J. Dent. Res. 16:339, 1937.
7. Dean, H. T. & Elvove, E.: Pub. Health Rep. 52:1249, 1937.
8. Dean, H. T.: Pub. Health Rep. 53:1443, 1938.
9. Dean, H. T.: Am. J. Orthodont. & Oral Surg. 33:49, 1947.
10. Arnold, F. A., Jr.: J.A.D.A. 30:499, 1943.
11. Ast, D. B.: Pub. Health Rep. 58:857, 1943.
12. Deatherage, C. F.: J. Dent. Res. 22:129 & 173, 1943.
13. Bull, F. A.: J.A.D.A. 30:1206, 1943.
14. Weaver, R.: Brit. Dent. J. 76:29, 1944; ibid. 77:185, 1944.
15. Okerse, T.: So. African Med. J. 15:261, 1941; ibid. 18:255, 1944.
16. Day, C. D. M.: Brit. Dent. J. 68:409, 1940.
17. Downs, R. A. & McKay, F. S.: Am. J. Pub. Health 36:1307, 1946.
18. Klein, H.: Pub. Health Rep. 62:1247, 1947.
19. Bibby, B. G.: J.A.D.A. 31:228, 1944.
20. Miller, B. F.: Proc. Soc. Exper. Biol. & Med. 39:389, 1938.
21. Finn, S. B. & Hodge, H. C.: J. Dent. Res. 18:252, 1939.
22. Dale, P. P., Lazansky, J. P. & Keys, P. H.: J. Dent. Res. 23:445, 1944.
23. Finn, S. B. & Ast, D. B.: Science 106:292, 1947.
24. Jay, P. & Arnold, F. A., Jr.: J. Am. Col. Dent. 12:54, 1945.
25. Jay, P.: J.A.D.A. 33:489, 1946.
26. Dean, H. T. et al: Pub. Health Rep. 54:862, 1939.
27. Volker, J. F.: Proc. Soc. Exper. Biol. & Med. 42:725, 1939.
28. Lukomski, I.: Am. Rev. Soviet Med. 2:543, 1945.
29. Editorial: J.A.D.A. 34:345, 1947.
30. Behrman, A. S. & Gustafson, H.: Ind. & Eng. Chem. 30:1011, 1938.
31. "Manual of Water Standards," Washington, U. S. P. H. Service, 1942.
32. Ast, D. B.: (New York State) Health News 21:61, Apr. 10, 1944.
33. Robbins, C. J.: Connecticut State Med. J. 9:855, 1945.
34. Boyd, J. D. & Cheyne, V.D.: J. Pediat. 29:286, 1946.
35. Cheyne, V. D.: J.A.D.A.: 29:804, 1942.
36. Bibby, B. G.: J.A.D.A. 31:317, 1944.
37. Knutson, J. W. & Armstrong, W. D.: Pub. Health Rep. 58:1701, 1943; ibid. 60:1085, 1945; ibid. 61:1683, 1946.
38. Knutson, J. W., Armstrong, W. D. & Feldman, F. M.: Pub. Health Rep. 62:425, 1947.
39. Sargent, E. J. & Moses, J. B.: J.A.D.A. 30:1246, 1943.
40. Bibby, B. G.: Dent. Survey 23:463, 1947.
41. Anon.: J.A.D.A. 34:411, 1947.
42. Jordan, W. A. et al: J.A.D.A. 33:1385, 1946.
43. Council on Dental Therapeutics: J.A.D.A. 34:700, 1947.
44. Lukomski, I.: Am. Rev. Soviet Med. 4:352, 1947.
45. Epstein, S. & Schamp, H. M.: J.A.D.A. 31:1233, 1944.
46. Atkins, A. P.: J.A.D.A. 31:353, 1944.
47. Robinson, H. B. G.: Dent. Survey 23:470, 1947.
48. McClendon, J. F. & Carpousis, A.: J. Dent. Res. June-Aug. 1945.
49. Bibby, B. G.: J.A.D.A. 34:26, 1947.
50. McClure, F. J.: (through) Science News Letter 52:110, Aug. 16, 1947.
51. Ast, D. B.: J.A.M.A. 125:867, 1944.
52. Strean, L. P. & Beaudet, J. P.: New York State J. Med. 45:2183, 1945; also Dent. Survey 22:689, 1946.
53. Editorial: J.A.M.A. 132:610, 1946.
54. Restarski, J. S. et al.: J.A.D.A. 32:668, 1945.
55. Souder, W. & Schoonover, I. C.: J.A.D.A. 31:1579, 1944.
56. Lukomski, I.: J. Dent. Research. 20:649, 1941.
57. Hoyt, W. H. & Bibby, B. G.: J.A.D.A. 30:1372, 1943.
58. MacMillan, J. J.: Dent. Survey 20:2139, 1944.
59. Warner, G. R.: Oral Hygiene 36:1131, 1946.
60. Gill, J. R.: Dent. Survey 22:1876, 1946.

A Review of the Suntan Industry

(Continued from page 610)

We are now familiar with average skin reaction toward average summer sunlight. The third unknown is the number of hours the average person indulges in exposure to solar radiation. As far back as 1933, by virtue of studies on various beaches, the author claimed that four hours was the average period of daily sunbathing. Other outdoor activities including tennis, golf, boating, etc., have also been found to more or less conform to this average, i.e., 240 minutes. This figure has been

accepted by the industry and is vital in the formulation of an efficient sunburn preventive. We now have the three essential unknowns, which when considered in proper sequence, will bring into focus the specifications for a comprehensively safe sunburn preventive. These unknowns are, to repeat, average skin tolerance, temperate zone solar intensity and average exposure. This data is utilized as follows: 50 minutes irradiation or VE which it would produce, is the maximum non-injurious actinic response. The actual exposure was 240 minutes—sufficient to have caused a blistering burn. Therefore in order that the sunbather shall not be subjected to more than a VE. stimulus, the shielding film or sunburn preventive should not transmit more than 20 per cent of the sun's erythemogenic ultra-violet. This fraction of 240 minutes yields 48 minutes of irradiation computable as 100 per cent effective energy reception time, which will result in not more than a VE. This is perfectly safe irradiation and will stimulate pigmentation at its maximum rate.

To avoid confusion, we have refrained from introducing several other lesser but influential variables. Because of these variants the 20 per cent figure given above is too low and would deprive the user of maximum non-injurious ultra-violet benefits. The marked declivity in solar ultra-violet before and after meridian is of importance. The Luckeish data is based upon solar intensity at or near noon, whereas we are concerned with irradiations taking place hours before or after noon. Dorno reports from his studies of solar energy below 3600A′, (2950A′ to 3150A′ is the range of peak erythemogenic and pigmentogenic activity), that with a maximum intensity at 11 A.M., there occurred at 9 A.M. and 2 P.M. a 20 per cent diminution of actinic energy. Clark claims an even greater hourly depreciation in the same wavelengths. On July 16th at noon, a reading of 9000 ergs per sq. cm. per sec. was obtained. At 10 A.M. and 2 P.M. a decrease of 44 and 33 per cent respectively was recorded. An average of these differentials will net a mean ultra-violet reduction of 29 per cent at two hours before or after meridian. The peak of solar activity is at noon as is well known. Therefore energy reception during a four hour exposure would be greatest if it were so arranged that 12 M. exactly bisected this period, or in other words if the hours of irradiation were equidistant from the solar zenith. For example, the maximum declension of solar potency at two hours before or after noon is about 29 per cent. At four hours plus or minus noon, a maximum loss of 69 per cent occurs. Since a four hour exposure would have to take place either from 8 A. M. to noon, or from 10 A. M. to 2 P.M. or from noon to 4 P.M. or some other multiple in which solar potency would vary in the degrees expressed above, a modification of the Luckeish erythemal data is in order.

TABLE 2

Time Required to Produce	At Noon	2 Hours Plus or Minus 12M	Mean Severest 4 Hours
MPE.	20	26	24
VE.	50	65	60
PB.	100	130	120
BB.	200	260	240

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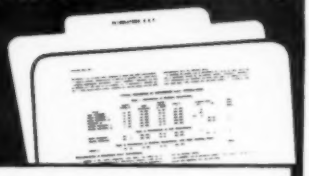

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From modified Table 2 it is apparent that for the four hours between 10 A.M. and 2 P.M., when actinic effect is strongest, a mean of 60 minutes will be required to produce a VE. Since a VE. is the maximum dermatologic response possible without injury and therefore desirable, *our* protective film should allow the passage of about 25 per cent solar ultra-violet. Twenty-five per cent of 240 minutes will net 60 minutes of irradiation computable as 100 per cent effective.

Another inconsistancy of some bearing is the remote possibility of any person remaining in a fixed position relative to the sun for as long as four hours. Body rotation would apportion in some degree periods of exposure to all areas. A four hour or 240 minute irradiation shielded by a film with a 25 per cent transmission factor would result in 60 minutes of 100 per cent effective ultra-violet activation. Potentially this would be divided between posterior, anterior and intermediate surfaces in the hypothetical ratios of 20-20-20, or 25-25-10 or other possible divisions. Because of the almost certainty of many position changes during four hours, it is extremely unlikely that any one surface would receive more than 75 per cent of the total irradiation or about 45 minutes. This is 15 minutes short of producing a VE. leaving a necessary and competent margin for the influence of still another variant.

The reflection of radiant energy on or near large bodies of water strongly fortifies the potency of direct sunlight by additive effect. Laurens is of the opinion that this property of water is about one quarter that of snow. It is more or less generally agreed that snow may reflect so efficiently as to increase by 100 per cent the effect of direct sunlight. Accepting this figure, river lake or ocean reflection will attenuate direct solar ultra-violet by at least 25 per cent. We have pointed out that a 25 per cent transmission factor plus body rotation during a four hour exposure, will not allow any surface to receive more than 45 minutes of ultra-violet stimulation, which is 15 minutes short of the time necessary to produce a VE. This allows ample leeway to cope with intensified solar energy as found on or near large bodies of water.

The entire support of the writer's 25 per cent transmission factor is based on the application of *one* normal film of the sunburn preventive in question. However in actual practice, the average person is apt to make a reapplication before the first coat was dry. In such a manner more than a single film is deposited on the skin. Therefore our "efficiency minimum" may be raised to 30 per cent. Within literally millions of cases where the product employed did transmit about 30 per cent, perfect protection was obtained by the average person under average conditions.

There are quite a few abnormal circumstances in which every manufacturer would like his product not only used but used successfully. The preparation designed for average use will fail when subjected to severe conditions for which it was not intended. First is tropical employment. Florida would probably be of most interest. During the winter months, solar intens-

ity there is comparable with that found in the northern states during the summer. But throughout the months of April, May, June, July and August, the erythemogenic rays in the whole south are at least 25 per cent more powerful than in the northern states. This increased potency may be compensated for by stating on the label to either reduce exposures commensurately, or apply two definite films of the product used. Then there is the matter of blondes and red-heads. It is fact that these persons may vary in increased photo-sensitivity by as much as 40 to 170 percent as compared with average brunettes. Here again the label should inform such persons of their hyper-reactivity and to neutralize same by applying more than one coat of protective film.

Oily or non-oily is another interesting aspect of the suntan business. History indicates that the earliest products were oils. The peak of their popularity was reached at about 1935. Since then greaseless products commenced displacing the oils until today they constitute about 90 per cent of the total market.

A phenomenon worthy of mention is the impressive sales of baby oils for the prevention of solar dermatitis. Two heavily advertised brands seem to have monopolized this new use for an old product. The writer states unequivocally that to promote the sale of baby oils as suntan products is dishonest and damaging to the entire industry. The public associates the word "suntan" with sunburn prevention—a service these preparations are not equipped nor designed to peform. One brand actively implies but refrains from direct wording that their product prevents sunburn. The other is a little more subtle but equally anxious. If they offered any protection, it would be less regrettable. One is composed of mineral oil which transmits ultra-violet practically 100 per cent. The other is peanut oil with a trace of hydroquinone which is also practically worthless as a sun screen. However they will be short-lived as sunburn preventives for the very fundamental reason that the purchaser does not get the protection he expects and pays for. The gullible consumer gets a severe burn and consequently dams the manufacturer and the suntan industry in general. Under these circumstances, it is strictly a one time sale and no one really gains. These observations were not dreamed up in a plush laboratory. They were noted by the writer at a seashore retail drug counter where these products were sold and their performance was reported a few hours later.

To return to the question, "oily or non-oily," actually lipoids such as vegetable oils, lanolin and, least desirable, mineral oil, are more or less beneficial to the skin under a hot sun. They are emollient and prevent the skin from drying out. But their disadvantages far outweigh their virtues. Most people object strongly to their greasy feel and appearance. More important is the fact that oils and greases are so easily displaced. Contact with blankets, beach chairs, robes, etc., means practically complete removal of the protective at the point of touching. As for the affinity of oils and greases for sand, this needs no elaboration. These are the

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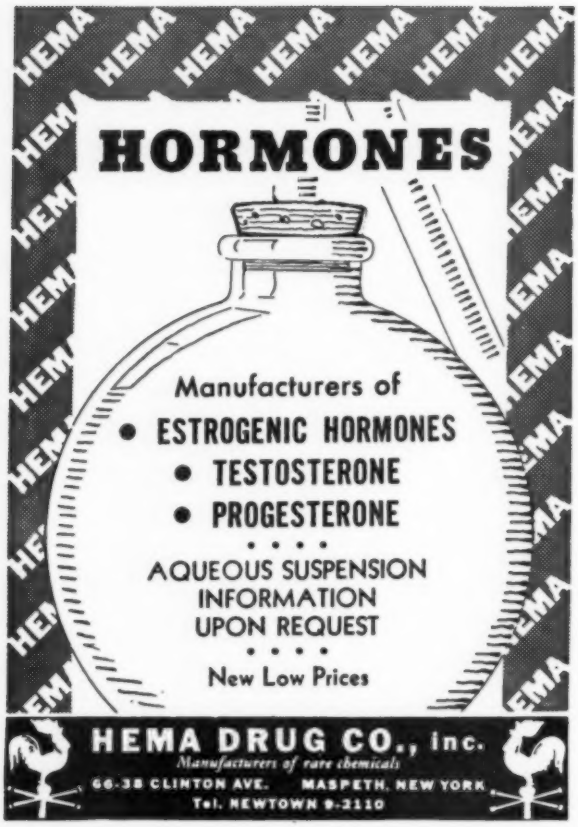

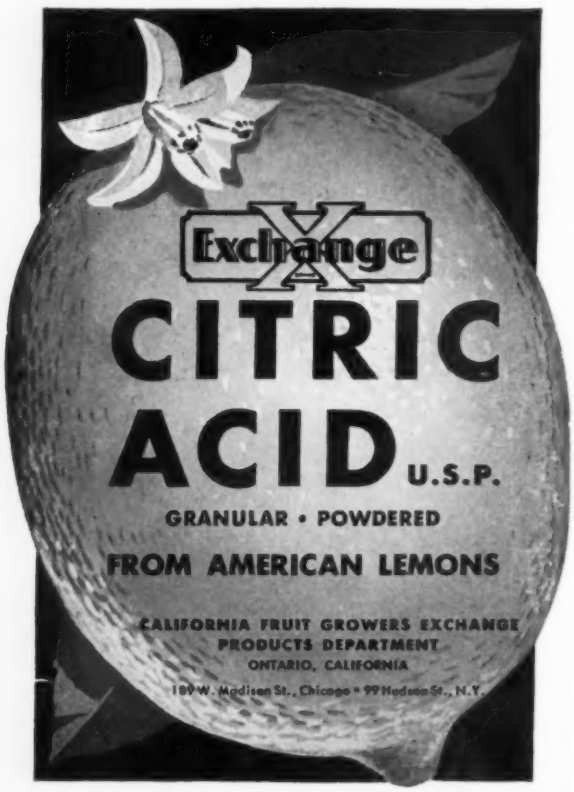

principal reasons why the oily products faded from the scene and inversely why the greaseless preparations dominate almost the entire market.

The hydro-alcoholic lotions do possess certain incomparable vital advantages. After application under a hot sun, complete dissipation takes place almost instantly, depositing a microscopic film of the filter or screen. When dry, which takes less than a minute or two, this film, (certain screens only), very definitely resists displacement by contact with blankets, chairs, clothing, etc. Even beach sand will not remove any appreciable quantity of same. Furthermore, such screens are usually invisible and cause no unpleasant feel or shine. The old story of alcohol being "drying" is sheer nonsense so far as sun lotions are concerned. If one were to soak part of the anatomy in 90 per cent alcohol for some time, there would be a withdrawal of lipoids from the skin. But to say that the application of a 50 per cent alcohol-water solution, which is evaporated almost instantly by atmospheric heat, can dry the skin —such a claim is fancy without fact. Dispelling this myth leaves no doubt that hydro-alcoholic lotions are the most desirable vehicle for sunburn preventive agents.

The behavior of absorbent or transforming chemicals in oily and non-oily bases is of some importance. The solution or dispersion of these agents throughout an oil obviously leaves relatively vast spaces between the dispersed molecules. In a hydro-alcoholic vehicle, after total dissipation, the active screen is deposited on the skin in a 100 per cent film of screening material providing no plasticizer is present. Naturally inter-molecular spaces here are immensely less than in the oils where the screen remains in solution. Reduction of inter-molecular spaces does very decidedly affect ultra-violet absorption or transformation.

Countless numbers of chemicals have been offered or suggested for use in sunburn preventives. A few are phenyl salicylate, menthyl salicylate, benzyl, salicylate sodium salicylate, esculin, quinine, benzyl cinnamate, esters of ortho-amino-benzoic acid and many other complex compounds too numerous to mention. Many of these are utterly worthless. Some are potential irritants such as the salicylates. Others by systemic absorption exhibit undesirable pharmacologic properties, most outstanding in this respect being quinine and hydroquinone. The majority, excluding their other characteristics, are so feeble in their ultra-violet absorption as to necessitate high concentrations in order to attain any degree of protection. Obviously, the greater the concentration of chemical present, the greater the chances for unfavorable dermatologic repercussions. The salicylates, any of them, will function providing not less than 10 to 12 percent is used. This is high and objectionable for reasons already stated. Anthranilic or ortho-para-amino-benzoic acid and esters are absolutely of no value even though they do fluoresce beautifully.

It is now concretely and unquestionably established that the only chemical structure possessing a powerful

specificity for the absorption of erythemogenic ultraviolet is the para-amino-benzoic acid grouping, the most effective esters being the alkyl and glyceryl. Any benzene compound without the para-amino-benzoic acid arrangement is impotent in concentrations of less than 10 to 12 per cent. In contrast para-amino-benzoic acid esters provide adequate protection in a 2 per cent concentration. The ethyl, propyl, iso-butyl and butyl esters exhibit several unfavorable characteristics—they are strongly anesthetic and upon contact with the lips, produce a numbing sensation which is frequently alarming to the user. Also these esters are crystalline and, when employed in hydro-alcoholic lotions, must be accompanied by a plasticizer to prevent recrystallization on the skin after the vehicle has evaporated.

The pioneer who has the courage and knowledge to depart from the "fluffy" suntan promotion of the past to something a little more concrete, will do himself, the public and the entire industry an immense service. The public should be told in definite but unmistakable language about sunlight—that it is a healthful and beneficial force but at the same time they should be informed that its capacity for harm is as great or greater than its beneficence. Tell the public that chronic solar dermatitis will permanently ruin a good complexion and eventually lead to more serious pathologic disturbances. Tell them also that a severe burn will rob the skin of "tan" not only that year but for many succeeding years. Without fear it should be stressed that too much sunlight, even though no irritation may be apparent, can accumulatively some day appear as full blown disease. Such persons should guard against such a potential by the constant use of a sunburn preventive. This type of advertising will sell far more merchandise than countless full color impressions of a female anatomy lying on a spring board with, of course, an Adonis hovering in the background.

Summary:—

1. The public now believes all suntan products prevent sunburn. To market a preparation that fails in this service, such as baby oils, is fraudulent and injurious to all.
2. Failures of the past are directly attributable to impotent, incompetent and ill advised formulation.
3. For reasons already expressed, oily or greasy sunburn preventives will never attain more than a small fraction of the total market.
4. The suntan industry has available 25 million new customers who will buy as soon as they are acquainted with the pertinent facts—and will repeat many times, if the protection they are promised is fulfilled.

Hair Dressings

(*Continued from page 605*)

ations which have an influence on the stability and mobility of the system.

Speaking in broad generalities these emulsions may be made by the use of mineral oil, lanolin, absorption base, beeswax, melted together to about 80°C. at which

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point the water containing borax previously heated to the same temperature is added with stirring. The system is then allowed to cool with stirring to about 50°C. at which point it is put through a colloid mill and then stirred until it cools to room temperature. The amount of sorbitan sesquioleate used may vary from one to five per cent, beeswax from one to five per cent, lanolin from five to ten per cent, absorption base from five to ten per cent, while the remainder of the oil vehicle is mineral oil.

Water-in-oil emulsions are not as stable generally as oil-in-water systems, but there is no reason to suppose that they cannot be made as stable as desired. Their stability would be dependent on the expected length of time required for the product to reach the consumer after its manufacture.

Emulsions may also be made in which three per cent of mineral oil is used but as oil-in-water emulsions which would behave the same functionally insofar as their ability to act as vehicles for the easy spreading of the oil through the hair is concerned. The water-in-oil emulsion however, has several functional advantages over the oil-in-water type. The most apparent one would be the greater resistance of the water-in-oil dehydrated film to moisture from external sources—for example, perspiration. In the course of a warm day the oil-in-water film might easily be removed, while the water-in-oil film would undoubtedly stay unaffected.

It is to be hoped that any further research done on these preparations would be done with a view toward increasing their stability as well as toward the improvement of their functional qualifications. There are a good many now on the market which are not as stable as they should be, and there is no worse impression that could be made on a customer than to see the product she would like to buy disfigured by a clear layer of oil on its surface. Stabilizing such a system is not an easy task, but with sufficient study it can be done.

Alcohol Short Again

(*Continued from page 603*)

come into production next year and also an improvement is anticipated in the output of ethylene glycol. Increases in the volume of these two products for antifreeze purposes should take a great deal of pressure off ethyl alcohol for this use. Producers are of the opinion that demand for ethyl alcohol in 1948 will closely follow the index of general production. However, they claim that the 1948 outlook is not clearly defined and a more accurate forecast cannot be made until some time in December.

Prices of ethyl alcohol vary according to producers and also according to costs. Naturally with molasses costs approximating thirty cents per gallon, the raw material cost for a gallon of alcohol made from molasses is not less than 75 cents per gallon, since it takes at least two and one-half gallons of molasses to produce one gallon of alcohol. Adding to this the manufacturing expense, packaging expense, shipping expense, selling ex-

pense, and general overhead, all of which are higher than they were, one can readily see that cheap alcohol is a long way off. The same goes for alcohol made from any other fermentable raw material since they are all on a level with or higher than molasses. And the same story holds partially true with respect to synthetic ethyl alcohol. The raw material for the synthetic material is ethylene which is obtained from petroleum gases. While this is not subject to the wide fluctuations that take place in natural raw materials, it is still subject to inflation in price as labor costs, plant costs, and other things entering into the picture advance. Then as we explained above, the manufacturers of synthetic ethyl alcohol are able to turn this ethylene into any number of products including ether, ethylene glycol, and so forth. Naturally if they can get more money for ethylene by turning it into products other than alcohol, they will do so. Also they would probably turn it into products which are exclusive with them, or at least not so commonly made as alcohol, in order to keep the users of their exclusive products happy. For these synthetic alcohol producers are apt to view the alcohol market with a long term eye remembering the time when they had to force their way into it in a highly competitive market. They probably also remember the many price wars that took place in the alcohol market with contracts being taken below cost.

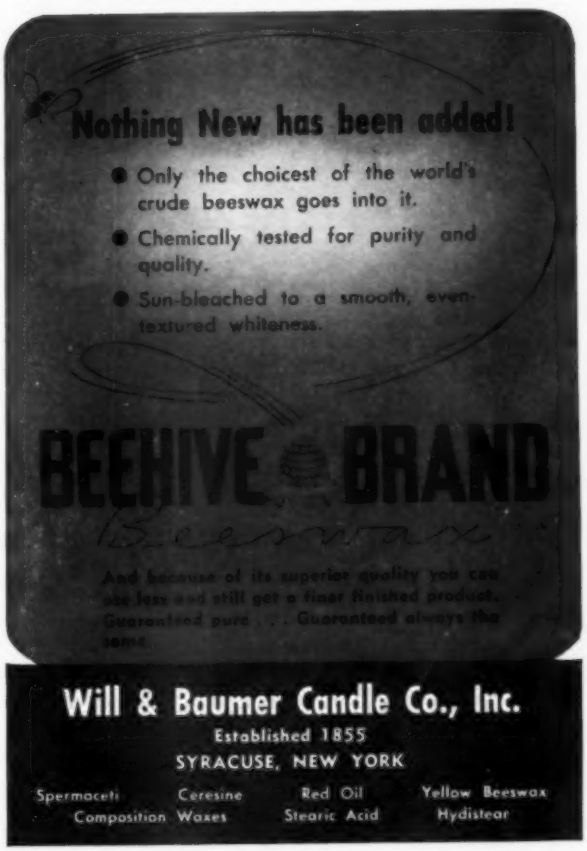
In a shortage of this kind it is natural that those who can use a substitute would do so in an attempt to stretch their supplies. Therefore, a number of users came into the market for isopropyl alcohol, and this product is now in short supply. A while back there was plenty of isopropyl alcohol available. The producers had large inventories and the normal users had large inventories. The consumers did not buy at a normal rate but proceeded to live on their inventories so as to curtail them. The manufacturers were then up against the problem of either shutting down their plants or broadening the base of consumption. They chose the latter course. Now with everyone trying to get large supplies of isopropyl alcohol, the cupboard is bare. The users and the makers have no inventory.

The alcohol situation today is one of uncertainty of supply due principally to the very acute shortage of anti-freeze materials which has put an additional load upon the alcohol producers. Real relief from the present situation is not anticipated until some time during the first half of next year. This will come as the result of increased production of methanol and ethylene glycol for use as anti-freeze will relieve the alcohol producers of a part of this heavy demand. Until that time, users of alcohol are going to have real headaches in obtaining all the alcohol that they need.

World Economy and The Industry

(*Continued from page 599*)

sult of the recent war. This is the reason for the inflation which is now current. To properly support the great national debt of this country it was necessary to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raise prices of almost everything to somewhere about double the prices which were in effect before the war. This is because the debt must be supported by taxes upon the people of the country, and there is a limit to the percentage of taxation if the initiative of the people is not to be stifled. The limit of taxation is somewhere around twenty-five per cent on the average. Therefore, in order to figure out what the national income must be it is only necessary to know how much it is going to take to support the debt, add to this the amount it is going to take to run the other functions of the government, and then multiply this by four. Since our national income before the war was only about half of the amount of national income necessary to have our debt commensurate with our income, it became necessary to double prices. This means that the dollar is worth only about half what it was before the war on the average. It also means that cash, bonds, life insurance, and similar things which are payable in cash, have deteriorated sharply in real value.

How to stop this inflation in values when it reaches the proper levels is something that is bothering the officials and economists of this nation. Also the large financial institutions of this nation are extremely large holders of government bonds, and a sharp drop in our national income could bring about a most serious situation. However, no one foresees anything but a continued high rate of activity for some time to come because of the heavy world needs. And that these world needs are going to be supplied by us in a large way seems certain as Congress meets to give help abroad under the so-called Marshall Plan. This extension of help abroad means that we will be heavy shippers of goods abroad for which the shippers will be paid. Naturally these payments will be the result of the spending by our government to aid these foreign countries. So in effect, the Marshall plan, aside from its world political aspect, is to a great extent a shot in the arm to maintain business in this country much the same as some of the shots in the arm were given during the depression of the early days of the New Deal.

Just exactly where we are heading no one seems certain. The steps which are being taken appear to be the ones suggested by the emergencies of the moment, for certainly no one has as yet revealed a long range program extending even a year. However, the steps which we are taking so far appear to be the proper ones for people in our position. Just how long it will be before the world situation clarifies and one can go about his business without having this situation constantly on his mind is anybody's guess. Certainly, thus far no one has dared to predict when this day will arrive.

Your Trade-Mark Record

(Continued from page 695)

GO-GETTER—VI—C—517,769
Botany Worsted Mills, Passaic, N. J.
Ser. Feb. 19, 1947 D. U. Feb. 3, 1947
GODDESS OF CRETE—VI—B—521,641

Dermetics, Inc., New York, N. Y.
Ser. May 1, 1947 D. U. Jan. 29, 1947

GOLD SEAL—VI—H—490,719
Robert B. Vallon (Gold Medal Hair Pro.), Brooklyn, N. Y.
Ser. Oct. 29, 1945 D. U. Sept. 20, 1945

HABANITA—VI—ABC—524,407
Jerome F. May, Asbury Park, N. J.
Ser. June 18, 1947 D. U. Nov. 21, 1939

HAPPY DAY—IV—A—515,722
The Procter & Gamble Co., Cincinnati, Ohio
Ser. Jan. 14, 1947 D. U. Dec. 17, 1946

HEX ONICIN—VI—H—516,187
Hexonicin, Inc., Beverly, Mass.
Ser. Jan. 23, 1947 D. U. May 24, 1946

IRON-8—VI—M—512,191
Monsanto Chemical Co., St. Louis, Mo.
Ser. Nov. 7, 1946 D. U. Oct. 2, 1946

J A V—IV—A—495,389
"J. A. V." Societe Anonyme, Benzons, France
Ser. Jan. 25, 1946 D. U. Dec. 1932

JO-TEENA (and design)—VI—CH—521,719
Lyncia Pearl Bonner (Jo-Teena Beauty Products), Baltimore, Md.
Ser. May 2, 1947 D. U. Aug. 27, 1946

LANOLIN PLUS—IV—A—512,839
Lanolin Plus Cosmetics, Inc., Chicago, Ill.
Ser. Nov. 19, 1946 D. U. Aug 12. 1942

LE PARFUM HOMAGE—VI—BC—516,723
Prince Obolenski Parfumeries, Inc., New York, N. Y.
Ser. Jan. 31, 1947 D. U. Nov. 18, 1946

LIQUITONE—VI—BCH—512,606
Princess Pat, Ltd., Chicago, Ill.
Ser. Nov. 14, 1946 D. U. July 16, 1927

LUCKY LOVE—VI—CDH—521,808
O. B. Gwyn, (Old Luck Co.), Memphis, Tenn.
Ser. May. 3, 1947 D. U. Feb. 1947

LULLABYE—VI—CM—505,035
Avon Products, Inc., New York, N. Y.
Ser. July 3, 1946 D. U. Apr. 1, 1946

MA-ME—IV—A—516,777
Master Methods, Inc., Oakland, Calif.
Ser. Feb. 1, 1947 D. U. Dec. 7, 1946

MAGNESIUM-8—VI—T—512,192
Monsanto Chemical Company, St. Louis, Mo.
Ser. Nov. 7, 1946 D. U. Oct. 2, 1946

MAGNIFICENCE DE MOLYNEUX—VI—B—521,915
Manuf. and Imp. of French Perfumes, Inc, New York, N. Y.
Ser. May 5, 1947 D. U. Apr. 5, 1947

MEDIMETICS—VI—CHM—524,596
Dermatics, Inc., New York, N. Y.
Ser. June 21, 1947 D. U. May 20, 1947

MIST CHARMED ESSENCE REDWOOD—VI—DT—513,720
Dermetics, Inc., New York, N. Y.
Ser. Dec. 5, 1946 D. U. June 20, 1945

NOCA—IV—A—501,900
Calgon, Inc., Pittsburgh, Pa.
Ser. May 11, 1946 D. U. July 1, 1941

OFF-STAGE—VI—BCHS—507,970
Coty, Inc., New York, N. Y.
Ser. Aug 24, 1946 D. U. Aug. 14, 1946

ORTHO-FUME—VI—T—516,812
California Spray-Chemical Corp., Wilmington, Del.
Ser. Feb. 3, 1947 D. U. Jan. 15, 1947

PALMOLIVE—IV—A—507,182
Colgate Palmolive-Peet, Co., Jersey City, N. J.
Ser. Aug 10, 1946 D. U. Jan 1, 1900

PENOLAN—VI—M—522,928
John H Woodbury, Inc., Cincinnati, Ohio
Ser. May 23, 1947 D. U. May 20, 1947

PERMETTEZ MOI—VI—BC—513,952
Al Rosenfeld, Inc., (Suzanne), New York, N Y.
Ser. Dec. 9, 1946 D. U. Nov. 29, 1946

POLI—VI—K—512,909
Hudson Products, Inc., Jersey City, N. J.
Ser. Nov. 20, 1946 D. U. Nov. 11, 1946

POLI-TITE—VI—K—523,130
Hudson Products, Inc., Jersey City, N. J.
Ser. May 27, 1947 D. U. May 15, 1947

POND'S—VI—CM—524,346
Pond's Extract Company, New York, N. Y.
Ser. June 17, 1947 D. U. Oct. 15, 1927

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BOOK DEPARTMENT

Drug & Cosmetic Industry

101 W. 31st Street New York 1, N. Y.

PRISMATIC—VI—C—521,781
Anatole Robbins, Inc., Los Angeles, Calif.
Ser. May 3, 1947 D. U. May 16, 1941
PURNATOL—VI—T—510,914
Wyeth Inc., Philadelphia, Pa.
Ser. Oct. 15, 1946 D. U. Oct. 4, 1946

QUEEN LILY—IV—A—480.874
Pioneer Soap Co., San Francisco, Calif.
Ser. Mar. 13, 1945 D. U. 1876

RC PRODUCTS—IV—A—512,989
Ridgefield Chemical Products Co., Ridgefield, N. J.
Ser Nov. 21, 1946 D. U. Apr. 15, 1946
RADIO WAVE—VI—G—515,632
Pilot Products Co., Salt Lake City, Utah
Ser. Jan. 11, 1947 D. U. Mar. 1, 1943
REBEL—IV—A—522,023
Campana Sales Company, Batavia, Ill.
Ser. May 7, 1947 D. U. Feb. 18, 1947
"RENOUVEAU"—IV—A—495,061
Les Parfums de Dana, Inc., New York, N. Y.
Ser. Jan. 19, 1946 D. U. Dec. 31, 1945
RIP-TONE—VI—H—512,701
Sim Taylor Rippy, Hull, Texas
Ser. Nov. 15, 1946 D. U. Aug. 1, 1946

SCATA-GRIME—IV—A—507,593
Thomas F. Petronio, Long Island City, N. Y.
Ser. Aug. 17, 1946 D. U. June 12, 1946
SKIPPER—IV—AI—519,340
The Lander Co., Inc., New York, N. Y.
Ser. Mar. 20, 1947 D. U. 1930
SNUDSY SUDS—IV—A—511,553
Help, Inc., Chicago, Ill.
Ser. Oct. 26, 1946 D. U. June 1942
SOFTOL TEENTRIM—VI—E—523,299
W. B. Associates, New York, N. Y.
Ser. May 29, 1947 D. U. Mar. 4, 1946
SPECIFIK—VI—B—521,692
Joseph W. Simoneau (J. W. Simoneau & Sons & White Mt. Perfumers) Nashua, N. H.
Ser. May 1, 1947 D. U. Apr. 2, 1947
STENDHAL—VI—ABCDEHIK—516,041
Stendhal, Paris, France.
Ser. Jan. 20, 1947 D. U. Feb. 22, 1945

TEEN BEAUTY—VI—CD—521,644
Dermetics, Inc., New York, N. Y.
Ser. May 1, 1947, D. U. Mar. 19 1945
TEEN CARE—VI—CD—481,630
Dermetics, Inc., Seattle, Wash.
Ser. Apr. 5, 1945 D. U. Oct. 11, 1943
THAT'S FOR ME—VI—CE—519,717
Avon Products, Inc., New York, N. Y.
Ser. Mar. 28, 1947 D. U. Mar. 6, 1947
THE 5TH FREEDOM—VI—T—525,193
Chemola Manufacturing Co., Houston, Tex.
Ser. June 30, 1947 D. U. June 30, 1947
THINKING OF YOU—VI—BC—515,051
Robert Enterprises, Inc., New York, N. Y.
Ser. Dec. 30, 1946 D. U. July 1, 1946
TING—IV—A—518,034
The Pharma-Craft Corp., New York, N. Y.
Ser. Feb. 24, 1947 D. U. Nov. 12, 1946

VENUS-RAY—VI—C—512,689
Spotlite Corporation, New York, N. Y.
Ser. Nov. 19, 1946 D. U. Aug. 22, 1946
VODISAN—VI—M—514,077
Vodol Company, Chicago, Ill., (Vodine Company)
Ser. Dec. 11, 1946 D. U. Nov. 30, 1946

WILSON, C. J.—VI—H—510,414
Carrie J. Wilson, Detroit, Mich.
Ser. Oct. 7, 1946 D. U. Feb. 1, 1945
WRISLEY—IV—AI—513,146
Allen B. Wrisley Co., Chicago, Ill.
Ser. Nov. 23, 1946 D. U. June 1934
Reg. 433,537 Oct. 14, 1947

"YOGA"—IV—A—495,074
Les Parfums de Dana, Inc., New York, N. Y.
Ser. Jan. 19, 1946 D. U. Dec. 31, 1945

ZIPPY—IV—A—501,443
Continental Chemical Company, Sacramento, Calif.
Ser. May 4, 1946 D. U. Apr. 17, 1946

READERS' QUESTIONS

LIQUID BUBBLING BATH: We wonder if we could impose upon you for a formula for a liquid bubble bath. The "Drug & Cosmetic Review" gives a write-up on the above item but no formula. Brooklyn.

It is rather difficult to give a specific formula for liquid bubbling baths inasmuch as the proportions will vary according to the type of wetting agent or foam former used in the bath preparation. Liquid products consist of fairly concentrated solutions. About 25 per cent of the wetting agent is dissolved in water together with perfume and a coloring material. Sometimes these fluids are made up with a little sulfonated oil as an addition to provide an oily effect. A typical formula might consist of:

Triethanolamine lauryl sulfate	**25 parts**
Sodium metaphosphate	**5 "**
Water to make	**100 "**
Color and perfume	**sufficient**

SMALL PACKAGE PROBLEM: We have a problem involving the preservation or stabilization of epinephrin solutions when packaged in small quantities. We have followed your suggestion on the use of a preservative. In large containers we seem to have succeeded fairly well. However, when the solution is packaged in bottles of 5 cc. or less, darkening of the solution seems to occur much more rapidly than in the large quantities. We had thought of the possibility of packaging such a solution in in a single-dose capsule, of about 10 minims. This solution is to be used by inhalation so that an edible container would not be required. The idea of using gelatin capsules has been suggested but tests have proved that such capsules are not feasible. It is possible to use some other small, disposable container for this solution. Montreal.

With regard to the first part of your problem, it is my opinion that light action is the responsible factor. Employing amber bottles might eliminate much of this problem when packaging in small 5 cc. units.

With regard to your second question, I would suggest that perhaps you might be able to prepare single-dose units by using a plastic container. While such usage might require a bit of experimentation and checking it is quite possible that cellulose plastics might serve your purpose. Why not contact manufacturers of such containers?

MODIFIED WAVE SOLUTION: We want to modify our wave solution containing ammonium carbonate and sodium sulfite that so it will be milky white and stay semi-thick. Could you give us any information as to how this could be done? Woodside.

I think your problem can be worked out by adding a suitable quantity of cetyl alcohol; to this should be added a small proportion of an emulsifier. Soap, or one of the synthetic materials, like sodium lauryl sulfate, are suitable as emulsifiers.

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DEODORANTS AND ANTIPERSPIRANTS: A question which has puzzled me is what is the difference between a deodorant and antiperspirant. I understand that there are certain legal differences which make the labelling of these products different in the eyes of the law. Can you give me any information? Dallas.

Although both antiperspirants and deodorants aim to avoid body odor the mechanism by which they do this is entirely different.

Antiperspirants contain astringent salts and related compounds which act to check the flow of perspiration; to slow up this flow, retard it or inhibit it. Deodorants are materials that diminish the odor of perspiration or its decomposition products, or prevent decomposition. This classification also distinguishes the two products from the legal standpoint. Deodorants are considered cosmetics under the eyes of the law, and as such need only meet the requirements of cosmetics under the Food, Drug and Cosmetic Law. Antiperspirants on the other hand affect a bodily function and are consequently classed as drugs. Therefore, the active ingredients contained in antiperspirants must be listed on the label.

HAIR STRAIGHTENER: Please give me such data as you may have on hand on hair straighteners. We need a product of this sort that is safe, must not discolor and be able to withstand the effects of water. Washington.

A hair pomade and straightener which should meet your requirements can be made along the following lines:

Yellow petrolatum	**6 parts**
Yellow beeswax	**1 part**
Peanut oil (refined)	**2 parts**
Perfume oil	**sufficient**

Melt the petrolatum in double boiler and add the other ingredients. The perfume should not be added until the mixture begins to solidify around the edges. This is an amber product. If a water white product is desired use white petrolatum and white beeswax and substitute equal parts of deodorized castor oil and mineral oil for the peanut oil. By varying the proportions of wax and oil a product can be obtained to meet almost any requirements.

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ONE READER'S COMMENT: We beg to acknowledge receipt of your letter of September 11th in reply to our inquiry, and wish to thank you very much for the information contained therein, as well as for your kind attention. We avail ourselves of the opportunity to express to you that we have found your DRUG & COSMETIC INDUSTRY magazine most useful and interesting. It has helped us to solve many problems, to make trade acquaintances and to get a better outlook on the market. Mexico.

This is the kind of letter we like to get! Thanks.

EFFERVESCENT SACCHARIN TABLETS: If available, I would appreciate a formula for an effervescent saccharin tablet. Hampton.

I do not have any specific formula for making an effervescent saccharin tablet. However, if there is no incompatibility, I do not see why they cannot be made in the usual manner. This involves mixing the active ingredient with citric acid or a mixture of citric and tartaric acids with sodium bicarbonate under controlled conditions. Methods for making effervescent tablets are given on page 361 of the 7th Edition of the "National Formulary."

LUSTER OIL FOR CATTLE: We are planning to manufacture a hair dressing for show animals, especially cattle. This product is to be applied after a thorough shampoo to give the hair a lustre. Can you supply us with a good formula for such a product? Through my association with the drug business for many years, a product of this type would probably contain a light mineral oil. Similar products on the market have a mineral oil, but have also some other ingredient which seems to make the oil evaporate to some extent. Any help that you may offer us will be appreciated. Madera.

Alcohol is generally included with mineral oil or mixtures of mineral and vegetable oils to facilitate evaporation and improve the spreading properties of the mixtures. What you want is really a two layer, "shake" type of hair dressing. One simple product of this sort consists of:

Mineral oil	**80.0**
Castor oil	**2.0**
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Of The Drug and Cosmetic Industry, published monthly at Pittsfield, Mass., for October 1, 1947

State of New York, County of New York—ss.

Before me, a notary public in and for the State and county aforesaid, personally appeared Thomas R. Farrell, who, having been duly sworn according to law, deposes and says that he is the Editor of The Drug and Cosmetic Industry, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, Drug Markets, Inc., 101 West 31 St., New York, N. Y.; Editor, Thomas R. Farrell, 101 West 31 St., New York, N. Y.; Managing Editor, Elmer Sheets, 101 West 31 St., New York, N. Y., Business Manager, Fraser V. Sinclair, 101 West 31 St., New York, N. Y.

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5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is (This information is required from daily publications only.)

Thomas R. Farrell, Editor.

Sworn before me this 25th day of September, 1947, Beth M. Fairclough, Notary Public.

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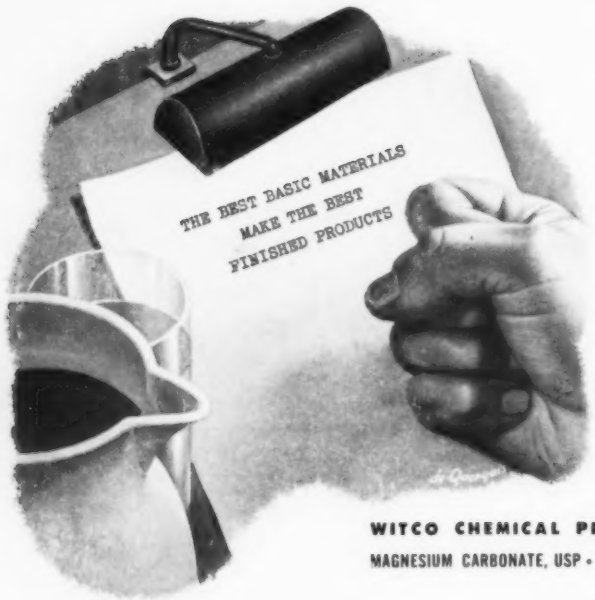

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Warner Brothers Co ..... Insert facing 649
Welch, Holme & Clark, Inc 699
Whittaker, Clark & Daniels, Inc. Ins. bet 680-681
Wigton-Abbott Corp 649
Will & Baumer Candle Co 707
Witco Chem. Co., Frank Stearate Div 716
Wolf & Co., Jacques 702
Zimmerman Incorporated, W. F 572